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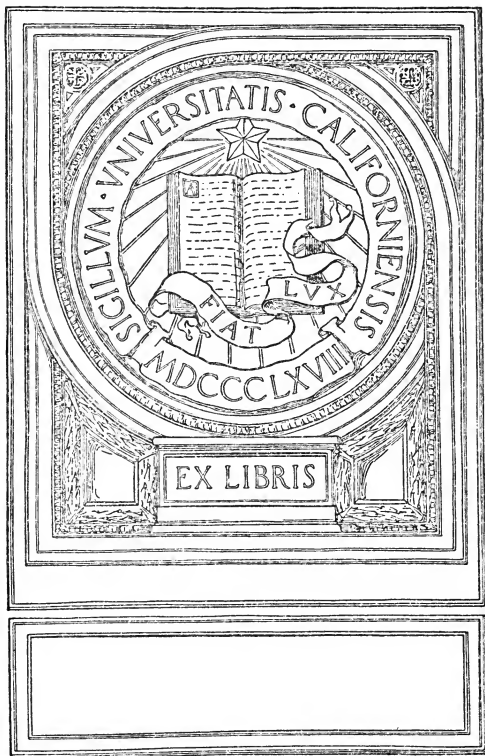
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IT SEEMS AS IF WE ARE

I.C.

PRICE ONE SHILLING.



Railway A
HANDBOOK

TO VARIOUS

Publications, Documents, and Charts

CONNECTED WITH THE

RISE AND DEVELOPMENT

OF THE

RAILWAY SYSTEM

CHIEFLY IN

GREAT BRITAIN AND IRELAND.

With prices at which they are now to be sold, by

Mr. EDWARD BAKER,

14 & 16, John Bright Street,

BIRMINGHAM.

Compiled by S. Cotterell.

Introductory.

Years ago in a country village the writer used to know an old fellow who had a perfect passion for discussing questions concerning the local management of the "Nor Western." There was no doubt about it, Dan's interest in the "Nor Western" was to be eternal, for Dan had been *one of its Platelayers!* And there were men who even said Dan would have been *MANAGER* of the great Company by now, but for the trifling objection that he was "*no scholar!*"

Since I last sat in Dan's little rural cottage encircled by the proper requisites for producing milk and honey, with which the taste of the delightful old navvy had led him to surround himself, I have witnessed the equally passionate interest in various little historical matters connected with railways among men in all spheres of life, among the heads of great commercial houses, and on till its interest could be seen within sight (so to speak) of the throne itself. And such a publication as this will, it is hoped, make authors' labours easier in seeking to satisfy further public taste for these old matters.

Among men, so many of whom I know are ready to be "to one's virtues very kind, and to one's faults a little blind," it would be almost possible to hope for the same honourable reception for these pages that an English Dictionary received from an old Scotchwoman in the far north, who considered it "*very interesting, especially as it hadna changed the subject quite sae often,*" but while feeling that with greater skill much greater interest might have been imparted to these pages, and disappointed that in general arrangement, consistency, and the tightness caused by the felt need of using *CATCH WORDS* for an easier reference to contents. I have not quite realised my aim, yet I hope that the very kindly reception afforded by Collectors and the Press to our last small compilation will be extended to this, which has involved much greater labour and expense. As to the accuracy and value of any remarks relating to the more technical books, I should fear for their good reception, had experience not taught that there is not on the face of the globe any race of men more genial in their character than our engineers, and more generous to acknowledge any honest attempt to do for them what they lack the time to do for themselves.

In reference to the question of rarity it may be as well to remark that with a very slight increase in the number of collectors of the early railway books these books will become some of the most difficult to procure. It seems wonderful, considering the number of publications of a period no further back than that of the railway mania of 1845 how very scarce the records of that mania are. GRAY was noted for the profuseness of his writings, but where are the traces of it now? The railway Press again was not only of a high character, but of large circulation. Very many of its volumes were thoroughly well worthy of preservation, and are now in demand for the important records they contain. Indeed, no collector would willingly be without a set of the '*Times*,' or '*HERAPATH*,' or of the '*Record*,' one or the other. How more than a very few future collectors get them, however, I do not know, for it is obvious that they are very

History of the Rise and Progress of the Railway System.

First Suggestion of a System of Railways.

1801 1 **I**N his *History of Railways* Mr. FRANCIS gives Dr. ANDERSON credit for being the FIRST TO SUGGEST AN ORGANISED SYSTEM OF RAILWAYS and enters fully into the Doctor's ideas, plans and estimates. "The notions were sagacious and instructive," he says, "*but the time had not arrived for the thorough and earnest consideration of the railway system.*" The idea mooted by Dr. ANDERSON found devoted followers in GRAY and JAMES. The Doctor's suggestions will be found in the "*Recreations*" below, Vol. IV. p. 198

Anderson (James, LL.D.) *Recreations in Agriculture*, etc. 4 vols. d8° 25/ 1801

WILLIAM JAMES.

2 [**F**OR a little work dealing with the important part taken in the History of Railways by WILLIAM JAMES, see under BIOGRAPHIES *infra*.]

GRAY. The Railway Pioneer.

1823 3 **B**OTH FRANCIS and GALT attribute to the indefatigable efforts of THOMAS GRAY (the poor Nottingham mechanic) the honour of being *the first man persistently to agitate the British public on the ADVISABILITY of public locomotive railways*. And both authors have deemed HIS INFLUENCE OF THE FIRST IMPORTANCE. It is now almost impossible to procure any of his first writings, and those below are exceedingly rare, and are the earliest railway books of their size. The fourth edition of his "OBSERVATIONS" in advocating the railway system, while suggesting railways to many towns, spoke ONLY OF TWO RECENTLY PROPOSED LINES, *viz.*, from PLYMOUTH and in SCOTLAND; and there was no sign whatever of any general public interest.

The frontispiece showed Blenkinsopp's locomotives pulling passenger and goods trains.

Gray, Thos. *Observations on a General Iron Railway*. d8° 4th Edition. £3/3 1823

GRAY. (The Rising Interest.)

1825 4 **T**WO YEARS later, however, Mr. GRAY had the satisfaction of being able to chronicle a most decided AWAKENING OF PUBLIC INTEREST. Here and there in his next edition he had to make alterations, and he swept away an economical dissertation to make room for EXTRACTS from the PUBLIC PRESS relating to NUMEROUS RAILWAY PROJECTS. He had liked the suggestion of STEAM CARRIAGES on roads but for goods only. He could refer to the proposed

History of the System—continued.

LIVERPOOL Line, to Mr. JESSOP'S PROJECT at CROMFORD, and to one at STROUD. He quoted Partington's references to Locomotives etc. His pages had grown from 131 to 223, and were full of hope. But it is the last work of his I have seen. Chevalier Wilson wrote of him in 1845 and he died I believe in 1850.—[See under BIOGRAPHY].

Gray, Thos. *Observations on a General Iron Railway or Land Steam Conveyance.* d8° 5th Edition. With two plates. £3 3/ 1825

THE "QUARTERLY REVIEW" ARTICLE.

1825 5 **AS ALL MEN KNOW** 1825 was a Mania Year. "To that Mania," says FRANCIS in his *History of Railways* (p. 136), "ENGLAND OWES HER RAILWAY SYSTEM." And it was during the course of that year that the *Quarterly Review* published the famous and oft-quoted article on RAILWAYS, and in it referred to the Mania which was leading people to dream of lands where :—

" . . . the molten silver
Runs out like cream on cakes of gold ;
And rubies
Do grow like strawberries."

The article was primarily a review of three of the earliest railway publications (1) CUMMING'S *Origin of Railways* (2) SYLVESTER on *Railroads* and (3) SANDERS on the *Liverpool and Manchester Railway*. It agreed with Mr. SANDERS in abhorrence of CANAL MONOPOLY, it highly disapproved of Mr. CUMMING'S estimate of a 15-mile speed for a Woolwich RAILWAY LOCOMOTIVE (which it likened to a CONGREVE ROCKET and even "*backed old Father Thames against the Woolwich Railway for any sum*") and it preferred to think with Mr. SYLVESTER of a *top speed of 8 or 9 miles an hour* [though even that gentleman really put it "9 or 10"].

The *Quarterly Review* containing the famous Article on Railways. Wrappers. 10/ 1825

THE SECOND RAILWAY MANIA.

1837 6 **THE** Subsidence of the SECOND MANIA can be seen in the pages below asking "WHENCE THAT DECLINE FROM ARDOUR TO APATHY SO MANIFEST IN MANY OF THE ORIGINAL SUBSCRIBERS TO THESE SCHEMES," and urging fines or forfeiture for those who will not pay up calls.

Hints to Railway Directors and Shareholders on the Subject of Unpaid Calls. 12 pp. 8° 10/6 1837

AN EARLY ADVOCATE.

1837 7 **AT** the suggestion of two Members of the "*Birm. Bristol and Thames Junc. Ry. Co.*" Mr. Geo. GODWIN (Assoc. Inst. of Brit. Architects) wrote on the great ADVANTAGES OF RAILWAYS, mentioning the general progress in transport, the history of the MANCHESTER RAILWAY, etc., and estimated that there were THEN IN ENGLAND 1500 MILES and in AMERICA over 3000 MILES of RAILWAY. Godwin, Geo. *An Appeal to the Public on the Subject of Railways.* 45 pp. 8° 15/ 1837

UNLUCKY ENGLAND.

- 1837 8** **MR. MUDGE** was, after Mr. Morrison, the FIRST ADVOCATE of a NATIONAL SYSTEM of Railways. He refers to the FINANCIAL RESULTS of all the railways, the BENEFITS of railways, the disadvantage of random schemes of "pitiful jobbery," of "schemes projected in a closet without even a map." We can ONLY HAVE RAILWAYS he said on GENTLE SLOPES and ENGLAND WILL NEVER BE ABLE TO HAVE RAILWAYS LIKE GERMANY and AMERICA. He advocated an official railway board with the leading member A PERSON of DISTINCTION, SCIENCE, and TALENT the others sound PRACTICAL MEN: one a MATHEMATICIAN, another a GEOLOGIST, a third an ENGINEER, and a fourth a LAWYER. **Mudge, R. Z. Observations on Railways with reference to Utility, Profit and the Obvious Necessity for a National System.** 73 pp. 8° 21/ Lond. 1837

On The Irish Commissioners' 2nd Report.

(Not 20 then but 100 now.)

- 1838 9** **THE Quarterly Review** after ridiculing poor CUMMING and SANDERS in 1824 for broaching the idea of speed at 20 miles an hour expressed another view in 1838. The SECOND REPORT of the IRISH COMMISSIONERS had been issued and the *Q.R.* commenced its review of this with ten pages on STEAMBOATS (mentioning that the largest was 30-ft. longer than any British battle-ship and that U.S.A. had then 500 STEAM BOATS). As to RAILWAYS it criticised and approved the report, and then went so far as to state that it believed a speed of SIXTY MILES AN HOUR on railways was probable and indeed saw NO REASON WHY 100 MILES AN HOUR should not be accomplished IF VERY LIGHT TRAINS WERE USED WORKED ON THE TOOTH AND PINION PRINCIPLE.

Quarterly Review Article on the Irish Commissioners' Second Report. 6opp. 10/ 1838

Poet of "the Western Railways."

- 1838 9a** It is a curious fact that Railways can claim a volume of Poetry of 1838. p. 24 we are told that "It was the DUTY of a Government Engineer at EXETER to have his engine ready to start at a moment's notice . . . [that] these locomotives travelled alone at great speed and were known by white signals." . . . And a stanza commences—

"Decked in white flag, with panting heart of flame,

Enamoured of the strife with yielding space

Lay the Express. . . ."

At first one might think 1838 was early for Exeter Expresses, but this is the book:—

Visions of the Western Railways. Dedicated to Sir Chas. Leman. Roy 8° cloth. 10/ Bagster, 1838

THE FIRST RAILWAY LAWS.

- 1838 10** **THE** undermentioned *Reports* led to the passing of the First Victorian Railway Acts. Among the items of interest may be noted that the LEEDS and SELBY RAILWAY by RAISING FARES "against the public interest" INCREASED

THEIR INCOME BY £1300; and a reference to WHEATSTONE AND COOKE'S TELEGRAPH which "transmits intelligence to any part of the island with instantaneous rapidity." The Telegraph, it says, cost on G.W.R. £250 with annual expense trifling whereas between London and Portsmouth cost £3300 a year not reckoning original cost and was abandoned elsewhere because of expense. Select Committee Reports 1838 to 1844 and Acts (from Vict. I. to VIII,) 138pp. 8° 17/6 1844

1840

Lord Seymour's Act for Board of Trade Control (vide Galt p. 367).

AN "ANGLO-LATIN" POET.

- 1841 10a THE following poem is in honour of the introduction of the railway system and contains references to *Senguin*, the *Blast-pipe*, etc. It was recited "*in theatro Sheldoniano die Junii XV.*," written by Franciscus Fanshawe, printed by Carolus Whittingham, and published by Franciscus Macpherson (!) Fanshawe, F. *Via Per Angliam Ferro Stratae*. 9 pp. 12° half calf. 7/6 Oxford, 1841

1842

Railway Clearing House Established (vide "Stokers and Pokers.")

"THE GOOD OLD DAYS."

- 1843 11 A SERIO-COMIC Article entitled "A PLEA FOR ANCIENT TOWNS" pointing out how railways will RUIN the TRADESMEN of SMALL TOWNS, how remote towns will get the advantage of the less remote, how the FINE OLD INNS DECAY and COACHES VANISH and suggesting how STEAM CARRIAGES MAY DIVERT DESTRUCTION, how AS SARUM WAS RUINED so may SALISBURY and other ancient towns be, etc. etc. Making a most interesting article including some brilliantly fine bits of description. *Vide* Blackwood's Edinb. Magazine. No. 335 pp.398 to 405 for September 1843. 8pp. 5/

"SAVE US FROM OUR FRIENDS!!"

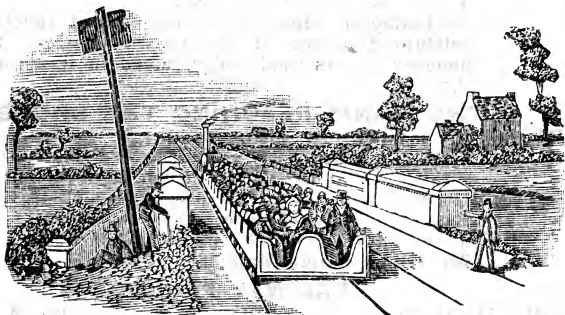
- 1843 12 NO PUBLICATION was better abused by the railway press than the one below. It was as a red rag to an angry bull. It advised STATE PURCHASE but showed that the Companies continually resorted to disgraceful intimidation. It advocated LOWER FARES and wound up with a LIST of the RAILWAY at date WITH VALUABLE CRITICISMS RELATING TO THEIR SUCCESS OR FAILURE. It gave rise to the RAILWAY REFORM ASSOCIATION and probably influenced the passing of the Act for State Purchase and for the Railway Dept. of the Bd. of Trade. I think Mr. GALT was the author. *Railway Reform: its expediency and practicability considered with Appendix giving a description of the railways in Great Britain and Ireland, fluctuation in the prices of shares etc.* 108pp. 21/ 1844

RAILWAY RATING.

- 1844 13 GREAT was the trouble in the year 1844 over the QUESTION of RAILWAY RATING. On the 8th June the *Railway Times* pointed out a case on the So. Western Line where the average of every other description of rateable property was

£1 8/2½ per acre but the railway was ASSESSED AT £65 9/1 (!) The *Morning Herald* thought that to tax the profit of the Co.'s trade was NOT ONLY GROSS INJUSTICE but POSITIVE ILLEGALITY. Justice Denman however thought otherwise. The following was probably the first monograph on the subject.

Railway and Land Taxation: shewing the origin, progress, law, operation and statistics of Poor and other Rates, injustice to railways, digest of decisions etc. 21pp. and index d8° *closely printed.* 5/ 1844



1844

Gladstone's Act for Parliamentary Trains (3rd class covered carriages with seats at a speed of 12 miles per hour to every station daily at 1d. per mile). (Galt p. 369).

THE GREAT MANIA—A BUBBLE.

1845 14 **J**N the excitable days of the great mania of 1845 the man who hesitated seems to have been MADE A DIRECTOR. Mr. MUNTZ, the Member for BIRMINGHAM, hesitated and in January, 1846, found himself actually CHAIRMAN of Parsons' SOUTHAMPTON MANCHESTER and OXFORD RAILWAY. At a Meeting of the Co. in that month he stated that Mr. PARSONS had deceived him, that he WOULD RATHER HAVE GIVEN £500 THAN HAVE JOINED it, and that he was ASHAMED of some of the men connected with it. The press puffed up the Co., but it broke at the panic and one of the last things heard of it was from one who took 60 shares on the strength of Mr. Muntz's name, who was told that they had been looking up £1000 WORTH OF DISPUTED DEBTS but that £3000 LAW CHARGES HAD BEEN INCURRED over them! I HAVE SECURED SEVERAL HUNDRED PAPERS, letters, documents, etc., referring to this extraordinary Company which was apparently going AT A BOUND from SOUTHAMPTON TO MANCHESTER and thence to OXFORD JUNCTION. 27 MILES were actually surveyed

for which I have "the little bill" (£604 16/). Other papers show that one Surveyor was engaged but FOUND SO LITTLE TO DO that he ENGAGED HIMSELF FOR SERIOUS WORK WITH ANOTHER COMPANY: while an AMUSING LETTER signed "R. W. Parsons, Capt. R. N." explains that his hairdresser applied for shares in the concern [on the strength probably of a rubbing acquaintance with the gallant Captain], but the Exeter barber's CIRCUMSTANCES were unknown. It is to be hoped he got off by a shave. The papers throw a flood of light on the ways of promoters in the days of the railway mania.

Southampton Manchester and Oxford Junction. A celebrated bubble of the railway mania. Several hundred papers used and received in its promotion.

£5

1845

THE MANIA REACHING THE SHOPS.

1845 15 **I** HAVE below a BASINGSTOKE relic of the RAILWAY MANIA. When every grocer's errand boy was buying SCRIP it was but natural that the knight of the tea canister himself should know all about railways and Mr. GIBBS, of BASINGSTOKE, was among those who *wrapped groceries up in a map showing the railways at date.*

Mr. Gibbs' Mania Map (18×12) 10/6

[1845]

RAILWAY PANIC.

1845 15a **A**MONG the voices that spoke out in defence of railways when the panic of November, 1845, had commenced was Joseph M'Kenna. He offered suggestions for gauging the value of investments at that critical time, said good lines would be safe, and pointed to £600,000,000 spent over the French war which never brought a farthing back in revenue.

M'Kenna, Jos. A Chapter on Railways and Railway Schemes. 32 pp. 8° 10/6

1845

RAILWAY DESPOTISM.

1845 16 **T**HOUGH LANDOWNERS often got absurd prices for land still (as the work below pleaded) railways ought not to have been allowed TO TAKE SIX ACRES OUT OF A MAN'S TEN and MAKE NO CONNECTING ROAD WHATEVER.

Mence, R. M. (Barrister) Remarks on Ry. Acts and Arbitrary Powers of Cos. 14 pp. boards. 5/

1845

COMPANIES' CARRYING LIABILITIES.

1846 17 **T**HERE was said to exist (and well might exist) in 1846 much doubt as to RAILWAY CARRIERS' LIABILITY. Lord Ellenbrough said they were "OF RUINOUS EXTENT." The author of *Railway Land and Taxation* thereupon "explained the why and because" and all that was then known for the benefit of Passengers, Traders and the Companies.

Railway Carrying and Carriers' Law. 92 pp. 8° boards. 5/

1846

"POSTPONE THE BILLS."

1846 18 **A**T a meeting of the "Literary and Commercial Society" of Glasgow Mr. WATSON, the CHAIRMAN of the GLASGOW STOCK EXCHANGE, read the following paper, urging the

postponement of the numerous Bills, and explaining the effect of the railway mania on industrial prosperity.

Watson, Jas. A Paper on the present Railway Crisis. 22 pp. 8°. 7/6 1846

Mr. MORRISON ON GAMBLING.

- 1846 19 "WE are making our railways too expensive, and these Company AMALGAMATIONS should cease. The mania for GAMBLING IN RAILWAYS should be stopped for the sake of genuine trade."

Morrison, Jas., M.P. Observations on the Defects of English Railway Legislation. 44 pp. 8° 5/ 1846

SAVAGE LABOURERS.

- 1846 20 READERS of Mr. FRANCIS' HISTORY will remember his account of the EARLY RAILWAY LABOURERS, the DREAD of them, their MISERABLE DWELLINGS their PROMISCUOUS INTERCOURSE, and that Mr. CHADWICK first drew attention to them before the *Manchester Statistical Society*, making such startling statements as to give rise to a PARLIAMENTARY COMMITTEE. This paper will be found included below.

Manchester Statistical Society. Papers on Railway Labourers. By Robertson, Rawlinson, and Edwin Chadwick, with preface by Mr. Chadwick. 51 pp. 8° 10/6 [1846]

Railways Ruled by Turnpike Trusts.

- 1846 21 JN DEVEY'S *Life of Locke* there is a curious reference to some little failings of GEORGE STEPHENSON over the *Grand Junction* contract, and in the pamphlet below the opinion is expressed that railways should not be made by ENGINE MAKERS, that the whole business ought to be undertaken by TURNPIKE TRUSTS, and absurdities are illustrated in the ORIGIN of the SOUTH EASTERN Railway, the CAREER of THE BRIGHTON Railway, etc.

Troup, Jas. Railway Reform and Rights of the Public in Railway Highways. 39pp. 8°. 10/6 1846

THE CLEARING HOUSE.

- 1846 22 THE following paper will serve as a first report of the effects of the establishment of the RAILWAY CLEARING HOUSE for through traffic (a convenience that arose through diversity of gauge.) They were written, says Mr. S. Sydney, by Mr. H. Morison, the founder of the system.

Origin and Results of the Clearing System in operation on the Narrow Gauge. 26pp. 8°. 10/6 1846

THE MANIA AT GLASGOW.

- 1846 23 In the following memento will be found a petition signed by a large number of GLASGOW Merchants, and a report of the public meeting begging the Prime Minister, Sir Robt. Peel, to PUT A CHECK on the RAILWAY BILLS THEN IN PROGRESS, on account of the DANGER TO THE MERCANTILE INTEREST.

Report and Resolutions of a Glasgow Public Meeting March 20th. 15pp. 8°. 10/6 1846

STRUTT'S BILL.

1847 The year 1847 brought the Bill of Mr. STRUTT. It gave "Sops for Cerberus" by offering to make preliminary survey more agreeable for the Co.s while "preparing a red for them by which any 'Jack in office' could 'meddle' with their most private affairs." even the number, kind and salaries of their servants and inspection of all and every paper and document might be asked for. It seemed to confuse the press; they first accepted it and then made a continuous howl at it.

1847 24 Even the voice of Mr. SAMUEL LAING (late Secretary of the Railway Department of the Board of Trade) rang out warning against Mr. STRUTT'S BILL. "We cannot revoke powers and privileges once granted" he said. And WE SHOULD HAVE MADE NO SUCH ADVANCE IN MILEAGE OR SPEED HAD WE WORKED ON THE BELGIAN or FRENCH SYSTEM. He gives us a sketch of early railway legislation and its results, and said the Bill involved (1) a breach of faith (2) injustice and (3) mischief. "Mr. Laing has written the best and calmest exposé of the Bill that we have seen" said HERAPATH.

Laing, S. Observations on Strutt's Bill. 32pp. 8°
10/6 1847

1847 25 ANOTHER work carefully criticising the Bill and pointing out the "MISCHIEF OF MEDDLING" said it would increase expenses, dispense with engineering evidence, and with "Bradshaw" (!) would decrease speed etc.

Observations on Strutt's Bill. 56pp. 8° 7/6 Bigg 1847

THE NEW RATING LEGALLY EXPLAINED.

1847 26 A VERY full account of the then recent Queens Bench AND decisions on the famous Rating Cases of the SO. WESTERN **1849** [17pp.] GRAND JUNCTION [15pp.] and GREAT WESTERN [16pp.] with explanation of the Law founded thereon will be found in the following:—

Penfold, Chas. Principle and Law of Rating of Railways etc. for Relief of the Poor. 96pp. 8° 7/6 1847
—— Second Edition, 190pp. 8° 7/6 1849

HISTORY OF THE MANIA.

1848 27 FOR a full descriptive account of the Railway Mania D. Morier Evans may be consulted. He deals with the COMMERCIAL CRISIS 1847-8 but takes the separate epochs of the Railway Mania, the Food and Money Panic etc. and in it he mentions Mr. SPACKMAN (elsewhere referred to). One interesting document quoted by Mr. Evans runs as follows:

Dear Sir,

Do you want a director of your railway? as I have lately been dealing rather extensively in such commodities, and am a director of the "Direct - - - advertised in the — and other papers . . . and as I find railways more profitable than law, I have cut the latter. If you can put my name down as a director I shall be obliged.

Yours faithfully

Evans, D. Morier. The Commercial Crisis. d8° cl.
10/6 1848

A FINANCIAL HISTORY.

1848 28 THOS. GRAY was the most persistent advocate for Railways. JAMES MORRISON was the most persistent early reformer for public benefit from them. He spoke in Parliament in 1836. He continually pleaded for the public rights, and in

1848 wrote on "*English Railway Legislation*," in which he explains the INFLUENCE of the TEN PER CENT. PROFIT LIMIT ON PREMIUMS, AMALGAMATIONS, and EXTENSIONS. He shows the rise and fall of Companies' shares before and after 1845-6, quotes Mr. HUDSON's statement THAT £50 INVESTED IN THE YORK AND NORTH MIDLAND MIGHT MEAN £250 (through PREMIUMS) and furnishes us with what amounts to A FINANCIAL HISTORY OF THE RAILWAY SYSTEM FROM 1836 TO 1848.

Morrison, Jas. *The Influence of English Railway Legislation on Trade and Industry.* 187pp. d8° 10/6 1848

PAISLEY SUPPORTS MR. LOCKE.

1849 29 **BELOW** is a report of a speech by the Rev. PATRICK BREWSTER, of PAISLEY, made in the Abbey Church supporting Mr. LOCKE's proposals for running SUNDAY TRAINS. Mr. Brewster's bravery, perhaps, was equal to that of William Wallace?

Sunday Trains Defended. 18pp. p8°. 5/ 1849

The Illustrious Philosopher Spackman.

1849 30 **WHEN** the *Times* hurled its thunderbolt at the Railway Mania Mr. Spackman found himself in pretty hot water. He had been requested by that paper in November, 1845, to show the British public that they had really no idea of the impossible amount of money that they were guaranteeing to railways. And it seems that in estimating it at £590,000,000 he "laid the paint on pretty thick," for he included the most obvious bubbles with capital *ad libitum*. A glance at the railway press at date will show the feverish excitement he produced there. Tuck, too, of "*Shareholders' Manual*" fame, screamed with anger because his work had been liberally extracted from and Mr. S. was pilloried for it in future editions of the *Manual*. The pages contain a splendid defence of Mr. Hudson from a Stock Exchange point of view. He refers to the panic caused by the *Times* article [which he wrote], deplored the fearful recent increase in the liabilities of the chief companies, and finally consoles himself by acquainting the public that he continues to buy shares.

Spackman, W. F. *A Review of the Railway Interest.* 54 pp. 8° sewn 21/ 1849

Value of Guaranteed Railway Stock.

1849 31 **MR. JOHN WHITEHEAD** (of the STOCK EXCHANGE and Author of some noted letters to Mr. GLYN) here claims Guaranteed RAILWAY STOCK TO BE BETTER THAN GOVERNMENT SECURITIES, and deals with 81 railway companies and their shares.

Whitehead, John. *Railway and Government Guarantee*, 6th ed. 56pp. 8° 5/ 1849

What the New Rating Meant.

1849 32 **LORD DENMAN's** decision on Rating will lessen the BRIGHTON Co.'s Dividend $\frac{1}{2}$ per cent. and the value of the Line £460,000," said Mr. LAING. "Railways are beneficial; why should they be the only traders to have

their profits rated?"

Laing, Samuel. *Railway Taxation*. 23pp. 8° 5/6 1849

TRICKS ON SHAREHOLDERS.

- 1849 33 **A** SPICY, SMART LITTLE *exposé* of the tricks of railway company promoters and of the artful wiles of Directors to prevent a clear understanding as to a company's transactions and position was published by "An Edinboro' Reviewer" in 1849—the year of the HUDSON CRISIS. It contains references to the WATERFORD and DUBLIN, the EASTERN COUNTIES, SOUTH WALES, and GREAT WESTERN Cos., the treatment of CARRIERS, the famous railway ROBBERIES, curious BALANCE SHEETS, the SHARE REGISTER, the old practice with all leading Cos. of illegally EXTENDING LONG JOURNEYS INTO TWO DAYS (WITH A NIGHT AT AN INN), etc., etc.

Railways and Shareholders. By "An Edinboro' Reviewer." 20pp. 8° *sewn*. 5/ 1849

MR. HUDSON and "The Yorkshireman."

- 1850 34 *The Yorkshireman* rose against Mr. HUDSON week after week even in the zenith of his awful power, and after his fall his deadly opponent laid hold of his co-director Mr. JAMES RICHARDSON and publicly degraded him. A LIBEL CASE ensued in which Mr. HUDSON was subjected to a severe cross-examination. The report of the case and criticisms of Mr. HUDSON were then published with a title-page worthy of a human bloodhound (I condense it:—)
Recent Trial for Libel. "*Richardson v. Wodson.*" 27pp. roy 8° 17/6 1850

See under *History of Companies York. Newcastle etc. infra.*

AN ANCIENT PHILOSOPHER.

- 1850 35 **T**HERE IS HARDLY A WORK of Dr. LARDNER's on railways that should not be treasured. Here while apparently only an enlargement on the ADVANTAGES of transport, on ANCIENT ROADS, on the permanent way, the ROLLING STOCK, STATIONS, CLEARING HOUSE, TRAFFIC, PROFITS, ACCIDENTS, TELEGRAPHS, and FOREIGN RAILWAYS with a mingled air of FRANCIS, GALT, and FINDLAY, there is throughout the work a *profusion of quaint items* of course altogether foreign to these latter authors well exemplified in his curious list of morals deducible from railway accidents; e.g. Rule III. "IF A SECOND CLASS CARRIAGE has no door passengers should not put out their legs," and Rule VII. "EXPRESS TRAINS are MORE DANGEROUS than ORDINARY TRAINS . . . only use them when great speed is required," while Rule X. warns one against JUMPING OUT OF THE TRAIN AFTER A HAT OR PARCEL!

Lardner, Dr. *Railway Economy*. 528 pp. English Edition; or 442 pp. American Edition. 10/6 1850

Romance of the Stock Exchange.

- 1850 36 **A** volume at once the MOST INTERESTING and THE MOST TERRIBLE IN MODERN ENGLISH LITERATURE. "Wholesale jobbing, gambling, fraud, even by peers and legislators."

"The GRANDEES of the MONEY MARKET SKETCHED"
 "Who would conceive that the STOCK EXCHANGE would furnish such amusing and delightful descriptions" Such are among the criticisms of the work below. But the characters are not only of the STOCK EXCHANGE for there is no more vivid picture shown than that of GRAY, "THE RAILWAY PIONEER, who, despite his acknowledged enterprise, dies steeped in poverty, and whose name no one has done more than Mr. FRANCIS to rescue from oblivion. Francis, John. *Chronicles and Characters of the Stock Exchange.* 386 pp. d8° cloth. 15/ 1850

Francis. *History of the English Railways.*

1851 37 MR. FRANCIS' splendid work is the only one which claims to be a HISTORY OF ENGLISH RAILWAYS. The very fact that he was so accomplished a writer and wrote of his subject in such a masterly style seems to have deterred others from following up the thread of railway history where he left it in 1850. He deals with all the LEADING EVENTS, the LEADING MEN, the COMPANIES, OLD RAILWAYS, THE TELEGRAPH, the ATMOSPHERIC SYSTEM, the GAUGES, etc., etc. It seems a great pity that the book is so very scarce.

Francis, John. *A History of the English Railway; its Social Relations and Revelations, 1820-45.* 2 vols. d8° cloth. 30/ 1851

SUPERANNUATION.

1852 38 THE pages below deal with the EARLIEST ATTEMPTS at RAILWAY SUPERANNUATION, and the efforts of Mr. MORISON of the Clearing House, Mr. LAING and others with suggestions for a GEN. RY. ASSOC.

Brydges, C. J. *The General Railway Association, Ry. Superannuation, etc.* 16 pp. 8° 7/6 1852

RAILWAYS IN 1853.

1853 39 A peep at the railway system of 1853 is afforded by the following in Mr. Brown's papers below:—

"Why should a Flenish boor travel better and cheaper than an English tradesman? Many lines have gone back to Hog Pens and Wild Beast Cages. No one thinks now of American Carriages. Amalgamation only means Monopoly.

Brown, Humphrey. *Railway Accidents, Amalgamation and Management.* 45 pp, 8° 10/6 1853

THE FIFTH BLUE BOOK.

1853 39a "EXCITED alternately the hopes and fears of proprietors and companies. It was a long and able report . . . went into the subject of rating . . . considered conditions attached to existing companies . . . supervision government should exercise . . . and the vexed question of facilities for the third-class passengers . . . the railway interests joined their forces against it."—(vide Francis II. 97).

Commons Select Committee on Railway and Canal Bills. 5th Report. 261 pp. 21/ 1853

Railway Mania—Railway "Cookery."

1855 40 "FOR an ADMIRABLE AND TELLING "SHOW-UP" of the

way in which RAILWAY "COOKERY" was carried on [DURING THE RAILWAY MANIA], and if the reader wishes to understand their general working and tendency I would refer him to a clever and ably written work, No. 89 of the *Traveller's Library*, published in 1855, entitled "*Railway Morals and Railway Policy*."—YOUNG "*Steam on Common Roads*," p. 72.

Spencer, Herbert. *Railway Morals and Railway Policy* (with Baines' Visit to the Vaudois of Piedmont bound therewith). 12° cloth. 10/6 1855

THE STEAM ENGINE POET.

- 1857 41 THE ONLY POET I know dealing with the subject of STEAM ENGINES and mentioning their PARTICULAR CHARACTERISTICS is Mr. T. BAKER. I believe this gentleman was an engineer and an inventor of a SYSTEM of LAYING OUT CURVES. Now and then he gets up considerable "poetic steam," and if he is a little too serious, and cannot always get easily round his corners, he is much too good to be left unhonoured and unquoted.

Baker, T. *The Steam Engine. A Poem.* 260 pp. p 8° cloth. 15/ 1857

AGEING OF SEASON TICKET HOLDERS.

- 1862 42 RAILWAY TRAVELLING must have been considered somewhat dangerous even in 1862 for in that year *The Lancet* published a little work which among other odd discoveries found "RAPID AGEING" came over "SEASON TICKET HOLDERS" and surmised that a recent fall in their numbers *was due to a recognition of that fact!*

Influence of Railway Travelling on Public Health.
From *The Lancet.* 152pp. 18° 10/6 [1862]

A GREAT REFORMER. GALT.

- 1865 43 FOR a THOROUGH UNDERSTANDING of the FINANCIAL HISTORY of the RAILWAY SYSTEM, of the LEADING COMPANIES, of the objects of the DIFFERENT PARLIAMENTARY ACTS, of the HISTORY of the REFORM MOVEMENT, Mr. GALT is perhaps the leading authority. A BRIEF BUT BRILLIANT SKETCH of general railway history including a description of the work of THOS. GRAY and a resumé of the FAMOUS QUARTERLY REVIEW ARTICLE is appended. The following table is illustrative of his advocacy of reduced fares.

Table showing Result to the Co.s of the great Contests in 1852-3, 1854, and 1857, from REDUCTION of FARES as under:—

Original Fares.			Miles		Reduced Fares.			Loss in
Ret. Tickets.					Ret. Tickets.			Dividends per cent per annum.
60/-	40/-	—	330	L. & N. W. R.	7/6	5/-	—	10/-
60/-	40/-	—	410	Gt. Northern	7/6	5/-	—	10/-
10/-	7/6	—	134	So. Eastern	3/-	2/-	—	—
8/-	6/-	4/-	46	Edin. & Glas.	1/-	9d.	6d.	20/-
8/-	6/-	4/-	55	Caledonian	1/-	9d.	6d.	10/-

Galt, Wm. *Railway Reform.* 405pp. d8° 21/ 1865

THE RAILWAY SYSTEM 30 YEARS AGO.

- 1865** 44 **THE** neat little popular account of the British Railway System by Wm. CHAMBERS includes a sketch of the romantic rise of the EAST KENT now the LONDON CHATHAM AND DOVER, and notes on recent operations of ATMOSPHERIC SYSTEM and on CHEAP RAILWAYS.

Chambers, Wm. *About Railways*. 103pp. 12° 3/6 1865

The following series of PAMPHLETS will form an interesting connecting link between the days of the Forties, and the present.

- 1868** 45 **E.** RYDE, *Rating of Rys.* (32pp.) 1868; F. T. HAGGARD, *A Mile of Railway*, 1869; F. T. HAGGARD, *Railway Facts and Lower Fares* [opposing cheap fares] 31pp. 1866; H. L. MORGAN, *Accounts and Audits* (Explanatory of the *Regulation of Rys. Act* to help Shareholders against "cooked" accounts] 35pp. 1869; A. J. WILLIAMS, *Appropriation of Rys. by the State* [Popular account of its advantages] 140pp. 1870; J. T. HARRISON, *Railway Income and Expenditure with tables*, 81pp. 1870; R. P. WILLIAMS on RY. ROLLING STOCK with tables, 82pp. 1870; and others. Scarce Collect. hf.cf. 15/

THE COMIC MAN.

- 1870** 45a **MR.** Rossendale of Oswestry has written for a Reading, "a Sketch of Mr. Judkins, Ex-Mayor of York, his first journey, his Railway Walk," etc. **Mr. Julep Judkins First Journey by Rail.** 17 pp. limp cloth. 2/6 Birm. 1870

MANAGEMENT.

- 1872** 46 **A** believer in the State PURCHASE of RAILWAYS, or, failing that, a GENERAL AMALGAMATION writes **Benson, B.** *Amalgamation of Ry. Co.s.* 30pp. 8° wr. 2/6 1872

AMALGAMATION.

- 1872** 46a **BELOW** is the **Lords and Commons Select Committees' Reports on Amalgamation** (with proceedings). 1027 pp. 10/ 1872

STEPHENSON.

- 1881** 47 **BELOW** is a copy of the Official Report of THE STEPHENSON CENTENARY. It includes much historical matter and a VIEW OF THE HOUSE and EVEN of THE VERY ROOM in which GEORGE STEPHENSON was born. **Stephenson Centenary. Official Report.** With illustrations. 118pp. d8° 3/6 1881

RATES.

- 1884** 48 **MR.** POPE (a barrister) here says that RAILWAYS would give satisfaction if it were not for RADICALS. **Pope, J. B.** *Railway Rates and Radical Rule.* 364pp. p8° 2/6 1884

STATE PURCHASE.

- 1887** 49 **THE** following work will well serve to take the [question of STATE PURCHASE of RAILWAYS up to 1887 on the side

of its advocates.

Chas. Waring. *State Purchase of Railways.* 204pp.
d8° cl. 4/6 1887

A RAILWAY NOVELETTE.

- 1889 49a NOT the least of the curiosities of our railways is a little modern railway novelette entitled *Queer Scenes of Railway Life*. I have not read it but taking a chapter on "Navvies and their Wives" I find therein a navvy's letter commencing:—"Sir,—You calls yourself a salesman of fish, but let me tell you you're no gentleman, and would rob a dying widow of her eyebrows to help to fill your old hair mattress, but plank bed is what you ought to have * * * *". From which quotation I submit that he who could think of this mode of making a mattress is of a sufficiently original turn of mind to conjure up many other appalling scenes of "railway life."
Newman, John. *Queer Scenes of Railway Life.*
124pp. 12° wr. 1/ 1889

TRANSPORT.

- 1890 50 FOR a French work on CONVEYANCE RATES and FARES there is:—
Transports et Tarifs (Incl. 126pp. on Transports et Tarifs par Chemins de fer). 478pp. d8° wr. as new. 2/6
Rothschild 1890

History of the Construction of Railways.

The First Railway Waggon.

- 1649 51 "RAILWAYS," says CHAMBERS, "are AN INVENTION of (Reprint) the COAL CARRIERS of NORTHUMBERLAND," and from the book below, published the year of the death of Charles I. (1649) NICHOLAS WOOD considers that a South Country man named BEAUMONT introduced WAGGONS there (which he says ran on tramways) as well as many wonderful engines. But like almost everybody who engaged in the local coal and other trades in those days he lost his money and got ruined. The following exceedingly quaint little booklet tells the tale, which should be read with WOOD's remarks.
Chorographia, or a Survey of Newcastle-upon-Tyne.
Scarce Reprint of the rare original. p8° wrappers.
42/ Newcastle 1649 reprinted circa 1818

First Mention of "Speed" on Railways.

- 1807 52 THE EARLIEST PUBLIC PREDICTION of the possibility of QUICK TRAVELLING ON PUBLIC RAILWAYS was made (as Day points out in his little work on Railways) in 1807, by that great modern philosopher, Dr. THOS. YOUNG, who in his famous work NATURAL PHILOSOPHY speaks as follows:—"It is possible that ROADS PAVED WITH IRON MAY HERE-AFTER BE EMPLOYED FOR THE PURPOSE OF EXPEDITIOUS TRAVELLING, since there is scarcely any resistance to be

overcome, except that of the air; and such roads would ALLOW the VELOCITY to be INCREASED ALMOST WITHOUT LIMIT." No one before Dr. Young had connected the idea of speed with that of railways. [The series of Lectures in which this famous prediction occurs form *to this day* the BEST EXISTING COMPENDIUM of the elementary PRINCIPLES of PHYSICS. It is free from technical symbols, but its precision, accuracy, and completeness are acknowledged as marvellous, and are combined with almost unparalleled brevity and clearness. It was far in advance of its time. The edition below is also largely prized for the beauty and accuracy of its illustrations of the principles of LIGHT.]
 Young, Thos., M.D. A Course of Lectures on Natural Philosophy and the Mechanical Arts. 2 vols. 4to, with coloured and plain plates. 42/ 1807

THE FIRST RECORDED RAILWAYS.

- 1819 54 "THE earliest approximation to the modern railway was the wooden tramroad" and the first man who is recorded as having seen one was LORD KEEPER NORTH (Lord Guildford). His brother in a biography "more amusing and instructive to the reader than honourable to the subject of it" says that at NEWCASTLE ON TYNE in 1676 among the curiosities of the place were "WAY LEAVES" or GROUND LET FOR LAYING WOODEN TRAMWAYS ON. (A description of these will be found in Vol. I. p. 265 of the work below.)

Roger North's Life of Lord Keeper North. 2 vols. d8° boards. 30/ 1819

PALMER'S SUSPENSION RAILWAY.

- 1824 55 MR. H. R. PALMER'S famous old plan for a SUSPENSION RAILWAY met with a good reception at the hands of Mr. TREDGOLD in his work on RAILROADS in 1825. According to LUKE HEBERT (p. 428) Mr. Palmer's plan was put into actual operation at Cheshunt, Herts.

Palmer's Description of a Railway, with plates. 8° 15/ 1824

NICHOLAS WOOD.

- 1825 56 FIVE YEARS before the Liverpool Contest GEORGE STEPHENSON'S early "learned friend" wrote one of the first books on railways. The subsequently great railway authority in his FIRST EDITION after speaking of early ways of transport, gave a HISTORY OF RAILWAYS, telling of "MASTER BEAUMONT," of COLEBROKE DALE, of CARR, of BARNS, and of the PUBLIC RAILWAYS of JESSOP (1789) and of OUTRAM (1800). He shows us some preferences for CAST IRON RAILS, had not seen a BLENKINSOPP LOCO., dislikes CHAPMAN'S calls BRUNTON'S TRAVELLER ingenious, refers to friendly talk with HEDLEY, credits BLACKETT for SMOOTH WHEELS, fully describes GEORGE STEPHENSON'S LOCOS, estimates their speed at 6 MILES AN

HOOR and has no "ridiculous expectations" of 12, ascribes the STEAM BLAST to STEPHENSON, and thinks the danger of HIGH PRESSURE could be got over by enlarging the "apertures between the boiler and the cylinder."

Wood, Nicholas. Railroads. 314 pp. and plates showing Rails, Stephenson's Loco with Steam Springs, and "Puffing Billy." 21/ 1825

TREDGOLD.

- 1825 57 TREDGOLD went over much the same ground as WOOD, but he much disliked HIGH PRESSURE ENGINES. He gave a critical account of EXISTING "railways," showed PLATE RAILS (upon which carts could run) succeeded the OLD WOODEN EDGE RAILS (sometimes iron covered) said GRIEVE of Edinb. invented MALLEABLE IRON EDGE RAILS (those now used being about 3 feet long), and described the STOCKTON and DARLINGTON Line, PALMER'S RAILWAY, and BROWN'S GAS ENGINE, refers to the failure of PUBLIC LINES, said that "LOCOMOTIVES MUST ALWAYS BE OBJECTIONABLE ON A PUBLIC RAILWAY," that STATIONARY POWER was better, but suggested a LIGHT MANUMOTIVE EXPRESS TRAIN for "letters and messengers" TO GO AT TEN MILES AN HOUR! And he gave his Formula for an engine's maximum useful effect etc. Tredgold, Thos. Railroads and Carriages. 184 pp. with plates showing wagons, rails, wheels, and loco with steam springs. 21/ 1825

SCOTSMAN ARTICLES.

- 1825 58 "It is much to the credit of the *Scotsman*," says the *Globe Encyclopædia*, "that it was the first newspaper in the kingdom to give railways hearty support, a series of remarkable and far-seeing papers appearing in its columns in 1825 from the pen of the Editor, Mr. CHARLES MACLAREN, full of confident anticipation." Below is a neat little epitome of those articles made by their author in 1825.
Epitome of "Scotsman" Articles. p. 8° 42/ 1825

WOOD'S SECOND EDITION.

- 1832 59 BETWEEN the dates of the FIRST and SECOND EDITIONS of WOOD's Treatise locomotives had passed from the stage of doubtful, to that of unquestioned, utility. The great trial of Locomotives, the celebrated LIVERPOOL CONTEST had taken place and Mr. Wood himself had been one of the judges. In the edition below he alters his pages to suit the altered times and of course fully describes the CONTEST.
Wood, Nicholas. Prac. Treatise on Railroads. 2nd. Ed. 53opp. 15/ 1832

THE UNDULATING RAILWAY.

- 1833 60 BADNALL's famous proposed Undulating Railway (well described by Hebert) was explained in his Treatise on Railway Improvements, and at the end there is some correspondence having more than ordinary interest as

being from Mr. Robert Stephenson SENIOR, dated Pendleton Colliery, 1832, from which it appears that GEORGE STEPHENSON'S BROTHER was inclined to support this principle (see also *Ry. Times*, 29 February, 1840).

Badnall, Richard. *Treatise on Railway Improvements* 142 pp. d8° cloth. 30/ 1833

THE EARLIEST WORKING BOOKS.

1833 61-4 **AMONG** working books giving Tables and Formulæ FROM the EARLIEST DAYS are Sir John MACNEILL'S EARTHWORK TABLES (THE FIRST OF THE KIND) dedicated to the genial Telford and dated 1833; Mr. G. R. BOOTH'S in 1836 on the STRENGTH and APPLICATION of MATERIALS (especially Witty's) for Bridges, Railways, etc.; in 1839 he much appreciated DAY brings out from SUNDERLAND his *Railway Calculator* giving EARTHWORK TABLES; in 1838 Mr. E. E. PERKINS gives Tables for CALCULATING WAGES by the Day or Hour and shows (by the word "Railway" being first in the title) that RAILWAYS WERE THEN GIVING CONSIDERABLE EMPLOYMENT.

Macneill's Tables. 254 pp. 8° 5/6 1833

Booth's Treatise. 35 pp. 8° wrappers. 5/6 1836

Day's Calculator. p 8° 5/6 1839

Perkins' Wages Tables. p8° 5/6 1838

TREDGOLD. THE SECOND EDITION.

1835 65 **TREDGOLD'S** work appeared as a second edition in 1835 ten years after the first without any alteration. The Liverpool contest had taken place, and on the Liverpool Railway trains ran easily at fifteen miles an hour but no reference was made to this amazing progress. It seems however that the victory of the "Rocket" was synchronous with TREDGOLD'S DEATH and that the edition arose from an increased public demand for any good book which described the railways.

Tredgold, Thos. *On Railroads and Steam Carriages.* 2nd edition, 8° 21/ 1835

PETER BARLOW.

1837 66 **PETER BARLOW**, one of the great men of the old railway world, did away with FISH-BELLIED RAILS. The present work includes THE HISTORIC REPORT to the LONDON and BIRMINGHAM and observations on the POWER OF LOCOMOTIVES with PAMBOUR'S work epitomised and his Table of GRADIENT EFFECTS.

Barlow, Peter. *Strength of Materials.* d8° 10/6 1837

EARLY AMERICAN RAILWAY SYSTEM.

1838 67 **AMERICAN ENGINEERING WORKS** were in 1838 attracting so much attention that DAVID STEVENSON of EDINBURGH, failing to find satisfactory information regarding them proceeded to CANADA and the STATES to see for himself, subsequently publishing his descriptions of the Harbours,

Navigation, Canals, Bridges, Railways etc. He refers to the QUINCEY ROAD, and others of date, illustrates the various rails then in use, notes the cheap construction, says that locomotives (LIMITED IN STATE RAILWAYS to 15 MILES PER HOUR speed) were in much more general use than horses for traction, that Messrs. BALDWIN, MORRIS, LONG, GRANT and EASTRICK, at PHILADELPHIA and LOWELL ENGINE Works at Lowell were then the largest of the locomotive works. DESCRIBES SOME BOGIE LOCOMOTIVES and shows a curious one for anthracite coal made by GILLINGHAM and WINANS at BALTIMORE with vertical cylinders and VERTICAL TUBULAR BOILER. This must have been THE FIRST WORK PUBLISHED in ENGLAND DESCRIBING BOGIE-WHEELED LOCOMOTIVES.

Stephenson, David. Sketch of Civil Engineering of North America, etc. With map showing routes of principal canals and railways, illustrations of early river steamers etc. d8° cl. 12/6 1838

WOOD'S THIRD EDITION.

1838 68 **W** By the time of his THIRD EDITION the Great Trunk lines had been partially opened from LONDON to LIVERPOOL, and to SOUTHAMPTON and from NEWCASTLE to CARLISLE, PAMBOUR had published his famous work, BRUNEL had commenced the Broad Guaged Great Western and Wood responded to the anxiety of the public for the latest authoritative opinion on the progress which had been made. Wood, Nicholas. Prac. Treatise on Railroads. 3rd Ed, 76opp. and 13 folding plates. d8° cl. 10/6 1838

THE EARLY BRIDGES.

1838 69 **T**HE FIRST IMPORTANT WORK dealing with THE FINE BRIDGES which began to appear with the growing passenger railways was that of S. C. BREES on RAILWAY PRACTICE. It was compiled from specifications and plans furnished or at least revised by the great engineers STEPHENSON, LOCKE, RENNIE, VIGNOLES, WALKER and others. ITS GRAND SERIES of PLATES as the author says are made to RESEMBLE ACTUAL DRAWINGS and the tinted plates can hardly be distinguished from them. They are however accurate working drawings, but with nothing "of the severe dryness, extreme intricacy, and general uninteresting appearance" of ordinary plans. And the grandest bridges of the OLD RAILWAY ENGINEERS on the earliest lines in the country have been recorded in these volumes in a manner worthy of them. There are also further PLATES OF DESIGNS, and short crisp remarks are added in description of the plates, and these are followed further on by useful details of construction. Brees' Railway Practice. The First Series, with eighty fine coloured plates, thirty-six pages of short descriptions, and one hundred and six pages of details of construction, 4°, cloth. 15/ 1838
The First, Second, and Third Series. [The Second Series (1847) being also chiefly devoted to Bridges,

but introduces two of Rennie's Locomotives and the Third Series (1847) a translation from Perdonnet *Portefeuille de l'Ingenier des Chemins de Fer*, dealing with the rails, chairs, turntables and machinery of construction, with some plans of Stations and Engine Houses, etc.

Together with the Appendix to Railway Practice (giving the Parliamentary evidence dealing with Construction, and a Glossary and Index to the terms used.) 373 pp. 1839. Altogether 4 vols. £2 2/ 1838-47

A Magnificent Work on Early Construction.

1838 70 **A** very handsome and substantial record of our early railways is contained in a volume by Mr. F. W. SIMMS, C.E., on **THE PUBLIC WORKS OF GREAT BRITAIN**. The elaborate entrance to the *Primrose Hill Tunnel*, then in course of erection on the LONDON and BIRMINGHAM Ry., forms the frontispiece; on the title-page is a view of Old Watford Station, and this is followed by no less than EIGHTY-THREE FULL-PAGE PLATES, each in itself a study, showing the buildings and cuttings and other works on the LONDON and BIRMINGHAM; GREAT WESTERN; SOUTHAMPTON; GREENWICH; CROYDON; BIRM. BRIS. and THAMES JUNC.; and the GLASGOW and GARNKIRK RAILWAYS, as well as the two celebrated LOCOMOTIVES Hawthorne's "COMET" the first ever used on the NEWCASTLE and CARLISLE Railway (which passed GEORGE STEPHENSON'S birthplace) and the "HARVEY COMBE" probably the first railway locomotive to enter LONDON. The shapes of rails used in the early lines are shown according to thirteen different companies, while examples of various great works make up the 150 fine plates which together with their descriptions form the first colossal monument of the railway era of British engineering.

Simms, F. W. **Public Works of Great Britain.**

First or Second Edition (both alike). Roy. fol. cl. £3 3/ 1838

Robt. Stephenson's own copy of Longridge.

838 71 **I**N the little work below, by Robt. Stephenson's great friend, with a frontispiece showing BEDLINGTON IRON WORKS (near Morpeth) where the celebrated FISH BELLIED RAILS were made, there are a series of papers including remarks on the then new MALLEABLE RAILS, the angry correspondence between BIRKENSHAW and CHAPMAN, interesting letters from Mr. JESSOP, from Mr. BUCHANAN of the LANARKSHIRE Rys., an account of the opening and a description of the STOCKTON and DARLINGTON Railway (18pp.); description of the LIVERPOOL CONTEST (15pp.); a view of LONGRIDGE'S LOCOMOTIVE "BEDLINGTON," etc., etc.

Longridge, M. **Remarks on Malleable Railways, Account of the Stockton and Darlington Railway,**

History of the Construction—continued.

etc. About 110pp. 8° Robert Stephenson's own copy. £2 2/ Newcastle 1839

THE FIRST HISTORY OF RAILWAYS.

1839 73 ABOUT 1839 Mr GILBERT made a map showing the railways, and the "author of a publication on the Zoological Gardens" wrote a capital little history of railways to illustrate the map. Starting with an historical sketch of English commerce the author traced railways from the day when tramways first took 42 cwt. as easily as a horse and cart took 17 cwt., passed on to the career of Steam Engines, to rotary motion, and steam vessels on to the day of TREVITHICK and CHAT MOSS. Taking noteworthy works on most of the early lines, and the LIVERPOOL CONTEST, and the financial report of the L. & M., he ended with a List of Railways, etc. Of the FAMOUS EARLY PROPOSED LINES the map showed the three Welsh routes, the Central, and North, Kent, the "Northern and Eastern" extension to York. lines through the centres of Dorset to Bath, of Surrey to Arundel, of Northumberland towards Edin.; another through Alnwick to Berwick, and through Carlisle to Glasgow direct. Such is, I believe, the EARLIEST KNOWN HISTORY OF RAILWAYS.

Railways of England: containing an account of the origin, progress and present state. With a map 126pp. 18° 21/ Grattan 1839

PETER LECOUNT.

1839 74 PETER LECOUNT was considered the best man of 1839 to write the article on RAILWAYS for the *Encyclopædia Britannica*. In the pages below he amplified the article inserting much belonging peculiarly to the period in which he wrote. Its object was to shew men HOW TO START A RAILWAY. He gives the promoters an idea of the CONSTRUCTION and COST of PERMANENT WAY and ROLLING STOCK and HOW TO CHOOSE DIRECTORS, the directors how to CHOOSE the STAFF, and even the POLICEMEN which way they should walk and the SPECTACLED GUARDS how they ought to sit atop the train. He speaks of all the EARLY LOCOMOTIVES, the OPPOSITION, CONTEST, etc., of the G.W.R. as the most comfortable line, of a speed of 60 miles an hour, advocates HYDRAULIC LOCKS to get over inclined planes, and speaks of AMERICAN RAILWAYS so steep that sails are used on them.

Lecount, Lieut. Peter. Practical Treatise on Railways explaining their construction and management. 422pp. and plates. 10/6 1839

THE BRIDGES AGAIN.

1839 74a THE SECOND GREAT WORK on BRIDGES was in four volumes Mr. Hann dealing with the Theory and Mr. Hoskin the Practice and there are one hundred and twenty plates. Portraits of GEORGE and ROBERT STEPHENSON are affixed, the former being a very fine one.

Hann and Hoskin on Bridges. 4 vols in 3, 8° £2 1839

tory of the Construction—continued.

French Work on Railways.

- 9 74b **A** FEW years after Pambour's first work MM. Armengaud published 174pp. describing locomotives, wagons, carriages, rails, and an atlas showing the locomotives "LA VICTORIEUSE" "LA SEINE" "LA JACKSON" "TAYLEUR" tenders, wheels, curtained open passenger carriages, horsebox-like and another luggage van, a closed carriage, and with plates showing sections, and others of appliances, also of rails etc. It will be noticed from this fine work how elegant the French carriages were at this early period.
Armengaud. L'Industrie des Chemins de fer.
 4° and folio. 2 vols. £3 3/ Paris 1839

DAY. 2nd Edition.

- 9 74c **DAY** treated the whole subject of the permanent way in a practical, but remarkably lucid, style gave a capital little history of rails, described the Clarence and Stanhope railways, the gradients (with equalised planes) the hauling, embanking, bridges and even fencing.
Day, Jas. Construction and Formation of Railways.
 210pp. 8° 7/6 1839

KOLLMAN'S RAILWAY.

- 9 75 **MR. KOLLMAN'S** proposal for a NEW FORM of RAILWAY in 1836 drew from JOHN HERAPATH the remark that people "forget that the chief property of railroads (viz) THE SMALL AMOUNT OF FRICTION is the PRINCIPAL REASON WHY WE CANNOT ASCEND INCLINES." The remark will serve for history now. The inventor in his description below says by his plan he can (a) get round CURVES (b) keep his Engine on the Rails (c) DO WITHOUT UNNECESSARY DEAD WEIGHT (d) and can CLIMB INCLINES. Mr. Herapath hoped something might come out of the proposal.
Observations on Railways and an Account of Kollman's Method of Construction. 16pp. 8° 10/6
 Weale, 1839

CURIOSITIES OF LOCOMOTION.

- 9 76 **IN** a history illustrated by numerous woodcuts of famous ancient and modern roads, bridges, carriages, etc. we get 50 pages on LOCOMOTIVES, STEAM CARRIAGES, the LIVERPOOL and MANCHESTER RAILWAY (with its Stations, Engine Men, Signals and Tunnels), notes on the G.W.R. (now making) the BRIGHTON and Greenwich lines (with nice woodcuts) mention of locomotion by an expanding liquid (with a suggestion of Davy's) and even of "ELECTRO-MAGNETIC RAILWAYS."
Roads and Railroads. 340pp. p8° 10/6 Parker 1839

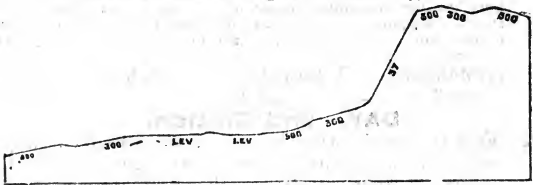
THE FIRST LAWS OF EARTHWORKS.

- 0 77 **PROBABLY** THE FIRST WORK EVER WRITTEN on the PRINCIPLES of RAILWAY EXCAVATIONS and Embankments was written by "A Resident Assistant Engineer" [on the BIRM. and GLOUCESTER RAILWAY]. He dedicates his work to the famous Capt. Morrison, points out that Scientific

Published by Edward Baker, John Bright Street, Birmingham.

Men are mystified and Contractors quite "at sea" in making their estimates from ignorance of principles of the subject and gives the result of his experiments, with diagram of Bredon Cutting etc.

Excavations and Embankments (Laws of). By Resident Assistant Engineer. d8° 7/6 184



"THE LICKEY INCLINE."

The Working Books of 30 to 50 years ago.

1841 78-86a **MR. R. C. MAY** after reading his paper at the Inst. of Civil Engineers published some of the FIRST TABLES for setting out railway CURVES in 1841; Mr. John QUESTED attempts in 1846 to SIMPLIFY the MOST APPROVED METHOD of SURVEYING and LEVELLING; the same year Mr. J. I. HUNTINGDON offered an EASIER WAY of CALCULATING EARTHWORK QUANTITIES (with tables for Bases, Land and Slope Areas, tables for calculating CURVES and GRADIENTS). Wm. KELLY in 1847 produced Tables TO SAVE TROUBLE in CALCULATION in so many Prismoids for a long line of road; Mr. T. BAKER (dedicating his work to Peter Barlow) claims to be A PIONEER RAILWAY SURVEYOR, writes OF THEORY and for PRACTICE and CRITICISES OTHER AUTHORITIES. Then from the renowned PENNSYLVANIA comes Mr. MUFFLIN's little work on CURVES and TANGENTS DISPENSING WITH TABLES or tabular statements, and easily remembered. The very presence of this book here is A HONOURABLE MEMENTO. In 1865 Mr. CUNNINGHAM supplied THE FIRST COMPLETE SET of EARTHWORK TABLES to which he added a table for speedy measurement by means of transparent paper or horn; Mr. JAMES HENDERSON in his tables gave A NEW FORMULA FOR THE SIDES OF PYRAMIDAL PARTS of Cuttings and a table for contents when the transverse section of original surface has regular or irregular inclinations.

May on Curves, 18° 5/ 184

Quested on Surveying. 73pp. plates, d8° 5/ 184

Quested on Railway Surveying & Levelling. d8° 5/ 184

Huntingdon's Tables and Rules. p8° 5/ 184

Kelly, Wm. Tables for Earthworks. with full explanations. d8° 5/ 184

Baker, T. (The Poet). Railway Engineering or Field Work preparatory to construction, with tables and formulæ. d8° 10/6 184

Mufflin, S. W. Railway Curves and Tangents. p 184

6/ Philadelphia 184

History of the Construction—continued.

- Cunningham, David.** *Earthwork Tables.* 100pp. royal 8° 5/ 1865
Henderson's Tables for Cuttings. 8° 5/ Glasgow [1852]
Strength of Materials and a Memento of Tredgold.

42 87 **OF THE WRITERS** of the FIRST TWO practical RAILWAY BOOKS I mention elsewhere what became of Mr. NICHOLAS WOOD and curiously enough this edition of the work of the other pioneer author contains a NOTIFICATION of HIS WORK and DEATH. THOMAS TREDGOLD died, it seems, in poor circumstances, in 1829, and this is the 4th edition of another of his successful books. Hodgkinson's Experimental Researches (forming the second part of this edition) is included.

Tredgold on the Strength of Materials. 4th edition. 2 vols. d8° 10/6 Weale, 1842

THE FIRST TELEGRAPHS.

42 88 **THE Magnetic NEEDLE TELEGRAPH** was patented by Cooke and Wheatstone 12 June, 1827, and Mr. Cooke put up the FIRST TELEGRAPH LINE, and the first successful one ever made, on the GREAT WESTERN in 1838. In the following pages he described, and illustrated, his principles after experience on various lines.

Cooke, W. F. *Telegraphic Railways.* 39 pp. roy 8° 21/ 1842

CHEAPER RAILWAYS.

43 89 **"Why SHOULD PUBLIC WORKS LAST FOR EVER? . . .** An all important question not sufficiently weighed; the reply is somewhat startling—it is pretty nearly this: IF A STRUCTURE WILL ENDURE FOR TWENTY YEARS, it will be CHEAPER IN THE END THAN A STRUCTURE WHICH WOULD WOULD LAST FOR EVER, [but] COST DOUBLE of the first . . . The AMERICANS found this out long ago, and even here the more shrewd of our capitalists have already begun to make a similiar discovery." *Such is a main contention of the work below.*

It illustrates Stephenson's proposed French lines, a U. and S. R. Loco, and full descriptions of the Constructions on the Utica and Syracuse Road, with isometrical projections added to the geometrical elevations and sections usually employed. The Belgian Lines of 1842 described by Edward Dobson, including particulars of Gradients, Curves, Gauges, Noted Inclines, description and speed of Locomotives, cost of lines, capital, etc. The whole to show what has been done in Belgium at £15,000, and in U.S.A. at £3,600, while British lines have cost £36,000 per mile.

Ensamples of Railway Making [taken from American and Belgian Practice]. Roy 8° cl. 10/6 Weale, 1843

TUNNELLING.

44 91 **ONE** of the earliest important monographs entering into this subject was the following by SIMMS who goes into minute details.

Simms, F. W. *Practical Tunnelling* (setting out the works, Shaft Sinking, heading driving, ranging the lines, levelling under ground, sub-excavating, timbering, and brickwork with the labour required and cost). 174 pp., 12 plates, 4° cloth. 7/6 1844

History of the Construction—continued.

Rise of the Battle of the Gauges.

- 1845 92 **MR.** Samuel Sidney says that the FIRST POPULAR PAMPHLET to appear on the subject was the one by Mr. Harding below
Harding, W. The Gauge Question—Evils of Diversity of Gauge and a Remedy. With a map, 8° bds. 10/6 18

GAUGES. EVILS.

- 1845 93 **A** good practical little brochure giving reasons *pro* and *con* and disadvantages for the BROAD GAUGE and MIXED GAUGES, in transshipment and with references to shifting truck bodies was published without author's name Effingham Wilson.
Narrow and Wide Gauges Considered; also Effects of Competition and Good Supervision. 36pp. 8° 10/6 18

THE SECOND HISTORY OF RAILWAYS.

- 1846 94 **FOR** a highly interesting little historical sketch of the permanent way, rails, chairs etc. as understood in 1846, this book will beat RITCHIE on Railways; he devotes 200pp. to those subjects; and gives 156pp. on EARLY ENGINES including 43pp. on ATMOSPHERIC RAILWAYS, 17 on MIXED GAUGES, 5 on GRADIENTS and so on.
Ritchie, R. Railways, their Rise, Progress and Construction. 444pp. with numerous illustrations 12° cl. 6/6 18

BORING.

- 1846 95 **HASKOLL'S** was the first separate work to deal with BORING and to give a description of the TOOLS, characteristics of different SANDSTONES, GRANITE, CLAY etc. as well as Curves, Slopes, and Foundations.
Haskoll, W. D. Assistant Engineer's Railway Guide in Boring. d8° cl. 7/6 18

History of the Battle of the Gauges.

- 1846 96 **THE FIRST** extensive work on the subject of the GAUGE was the book below by Mr. SIDNEY which gives us (i.e. Mr. Wm. CUBITT's opinion that EXCESS of GAUGE over 6 ft. means LOSS in DEAD WEIGHT; Mr. HARDING's statement that a good NARROW GAUGE ENGINE MOVED what a very powerful BROAD GAUGE ENGINE FAILED TO MOVE, that the DEAD WEIGHT is 35% GREATER on the BROAD, that the ATMOSPHERIC RESISTANCE was FAR GREATER for the broad; Mr. ROBT. STEPHENSON's statement that EXCESS in WIDTH is LOSS of POWER; and also Mr. NICHOLSON WOOD's amusing examination in which he allows himself to admit that "if a desperate man *did* want to go 100 miles an hour" he would be MORE LIKELY to ACCOMPLISH his OBJECT on the BROAD THAN on the NARROW GAUGE.
Sidney, Sam. Gauge Evidence. The History of the Railway System illustrated by the Evidence before the Gauge Commission. 400pp. sup roy 8° cl. 21/ 18

Battle of the Gauges and Brunel.

- 1846 97 **VIGIL** twits Mr. BRUNEL for his contradictions and connections with other lines, interchange of traffic, or

History of the Construction—continued.

gradients and curves, big engines, carriages outside wheels, and for his support of the ATMOSPHERIC SYSTEM and Mr. SAUNDERS for his opinions on COMPETITION.

Inconsistencies of Men of Genius exemplified in . . .
I. K. Brunel Esq. and in . . . C. A. Saunders, Secy.
G.W.R. By "Vigil." 3opp. 8° 10/6 1846

DOUBLE GAUGE.

1846 98 THE following pages include a strong protest against the DOUBLE GAUGE SYSTEM.

National Uniformity of Gauge. Letter to Lord Dalhousie preferring original Recommendations of Gauge Commissioners to recent Board of Trade proposals. With map. 16pp. 10/6 Stephenson 1846

THE GAUGES. SPEED.

1846 99 THE following pages by Mr. MELVILLE compared the speed on the G.W.R. with that on other lines and claimed that the G.W.R. had no advantage.

Melville H. S. Narrow Gauge speedier than Broad Gauge Railways as well as cheaper. 15pp. 8° 10/6 1846

The Broad Gauge [expensive in making]. By L.S.D. Vide G.W.R. under "History of Co.s."

DEMPSEY.

1846 100 **JN** 1846 G. Drysdale Dempsey issues a good general work of 135 large pages with 27 plates about 4opp. dealing with the GENERAL SHAPE of the line as to Curves, Gradients, Gauge and Slopes, 22pp. on the EARTHWORKS, 5opp. on the BRIDGES and other Buildings, and 2opp. on the RAILS, Chains, Sleepers, etc. as below:—

Dempsey, G. D. Papers on Railways. 4° wrappers. 7/6 1846

AN AMERICAN'S OPINIONS.

1848 101 **FROM** New York we see that CURVES in 1848 were thought an evil but that "GRADES" were more manageable, that ATMOSPHERIC RESISTANCE was seen to be enormous *so as to quarter the speed of an express down hill*, that UNDULATING RAILROADS (on the principle of COMPENSATION) "had had volumes" written about them, that broad GAUGE would be advisable but for break of gauge; it described and illustrated a street OVERHEAD RAILWAY, and thought even Clegg and Samuda's ATMOSPHERIC SYSTEM was not quite satisfactory.

Gillespie, W. M. Roadmaking and Construction of Roads and Railroads. 344pp. (71 on Railways). d8° 10/6 New York 1848

DAY. 3rd. Edition.

1848 102 **NINE** years after his second edition Mr. Day brought out a third and gives us the opportunity of seeing the progress the art of railway making had made in the meantime.

Day, Jas. Construction and Formation of Railways. 216pp. 8° 5/ 1848

Menai Bridge. The old L. & N. W. R.

- 1849** 103 **PLAYS** with his subject [The Tubular Bridge over the MENAI STRAITS] in the same spirit that fascinated the public years back in his *Bubbles from the Brunnen of Nassau*. His riveting scene is as good as a visit to the Hartz Mountains; and the Sketch of "the Engineer" gently smoking his cigar on the morning after the elevation of the first section of his stupendous fabric is worthy of Flaxman." So spoke the *Ry. Times* of Highways and Dryways. Bound therewith is "*Stokers and Pokers*" the same author's famous description of the LONDON and NORTH WESTERN RAILWAY, the ELECTRIC TELEGRAPH, and the RAILWAY CLEARING HOUSE [as contributed to the *Quarterly Review*].
[Head. Sir Francis] "*Highways and Dryways*" and "*Stokers and Pokers.*" 2 vols in 1. 83 + 208pp. 10/6. 1849.

Colebrook Dale, Telegraphs, and G. W. R.

- 1849** 103a **DISCOVERIES** often come from queer places. In a little "History of Wonderful Inventions" I have come across a view of HETTON COLLIERIES RAILWAY, of COLEBROOK DALE where iron rails were first used and of the G. W. R. BEING MADE NEAR BATH, all with descriptive notes. Also an early article on TELEGRAPHS.
History of Wonderful inventions. 12° 5/ 1849.

Britannia and Conway Bridges.

- 1849** 104 **OF** good accounts of the leading works of ROBERT STEPHENSON I have a little pamphlet describing the BRITANNIA and CONWAY bridges as under (*vide* CLARK below.)
Britannia and Conway Bridges (general description of) by a Resident Assistant, published with permission of Robert Stephenson, 34 pp. 8° wr. 5/

Chapman & H. 1849

- 1850** 105 **THE** year after Mr. Clark published his pamphlet he had finished his magnificent work on the two Bridges. The work is in two volumes royal 8vo, illustrated, together with a large folio atlas containing forty five plates, some coloured.
Clark, Edwin. The Britannia and Conway Tubular Bridges. 3 vols r8° and folio. £2 2/ 1850

Adams and The Railway Steam Carriages, etc.

- 1850** 106 **THE** light railway engineer here growls at bad permanent way, unmechanical locomotives and trains, and TOO GREAT WEIGHT, describes Mr. SAMUEL'S STEAM RAILWAY CARRIAGE "EXPRESS" (in which "travelling shaving pot, cigar propelled" as they called it, Mr. Samuel even ascended the LICKEY INCLINE), the railway steam carriage "FAIRFIELD" for the Bristol and Exeter line, the "ENFIELD," etc.
Adams, W. B. Road Progress, Amalgamation of Railways and Highways, Economy in plant and rolling stock, etc. 76 pp. 8° 21/ 1850

Clarke. The Third History.

850 107 **THE** third little History of Railways was written by Yorke Clarke. It contains special reference to ANDERSON, the first proposer of railways, and to THOMAS GRAY. It gave a view of the GREENWICH LINE with its train, a table of COST of principal railways and described the NAVVIES, SIGNALS, and SIGNALMEN (illustrated), while other sections of the book gave a sketch of the STEAM ENGINE and also of the ELECTRIC TELEGRAPH.

Clarke, R. Yorke. Railway Appliances in the Nineteenth Century. 221 pp. 18° 7/6 1850

WILLIAMS. OUR IRON ROADS.

852 108 **WITH** his ANECDOTES and DESCRIPTIONS of the objects of admiration and wonder in English railway construction and the railway system, Mr. WILLIAMS indeed first introduced the RAILWAY SHOW TO THE BRITISH PUBLIC, telling of GEO. STEPHENSON, MR. HUDSON, and the MANIA, and then pointing out to them the PERMANENT WAY, the RAILS, the famous BRIDGES, Stations, the ATMOSPHERIC SYSTEM, etc., etc. And as the "show" grew Mr. WILLIAMS' pages kept pace with them and are the nearest approach in England to THOS. M. COOLEY'S style of publication in the "RAILWAYS of AMERICA," while the descriptions are probably unsurpassed.

Williams. Our Iron Roads. 390 pp. d8° 10/6 1852
Ditto ditto 514 pp. d8° 7/6 1863

AUTOMATIC SIGNALS.

855 108a **TYER** in 1844 introduced ELECTRIC RAILWAY SIGNALS by which the train itself signalled the line clear and signals could be transmitted between two stations or elsewhere. (They were tried on the NORTH KENT). Both LONDON BIRM., and G. W. R., it seems, DISCARDED Cooke's telegraph after first trials.

Ogan, Alf. Railway Collisions Prevented. Illustrations, descriptions of Tyer's Railway Signals, etc. 54 pp. 8° 10/6 1855

The Last Bridge on the South Wales Route.

856 109 **THE** pages below accurately describe the LAST LINK in the CHAIN of RAILWAYS from LONDON to MILFORD HAVEN, BRUNEL'S BRIDGE over the WYE at CHEPSTOW. A large *frontispiece* gives a fine view of bridge, railway, and river.

Description of the Tubular Suspension Bridge at Chepstow. 11pp. 10/6 1856

FISH JOINTS, ETC.

855-7 110 **EVEN** George Stephenson was suspected as long as he was interested in his various patents. Engineers seem often to have found their interests clashing with their duties as professional men, and hence THE PERMANENT WAY COMPANY formed a united interest in patents. It

was joined by the BARLOWS, SIR JOHN MACNEILL and others. Their circular of Oct. 1855 illustrates the then new FISH JOINTS and various Sleepers, Rails and Chairs. That of July 1857 deals with EXPERIMENTS ON CAST IRON SLEEPERS.

Permanent Way Co.'s Circulars for Oct. '55 and July '57. 7/6 1855-7

HASKOLL.

1857 111 **3**N 1857 Mr. Haskoll published two large works, in which he suggested many entirely NEW METHODS OF CONSTRUCTION as the result of many years' practice.

Haskoll, W. D. *Railway Construction*. 368pp. and 250 plates and diagrams. 2 vols. imp. 8° cloth. 21/ (published £2/12/6) 1857

CHANNEL TUNNEL.

1861 112 **3** cannot say I have the first proposal made for a CHANNEL TUNNEL, but I have the FIRST ENGLISH PROPOSAL FOR JOINING ENGLAND TO FRANCE BY A TUNNEL, containing a brief history of the movement to date and the new proposal. It is

Chalmers, Jas. *The Channel Tunnel*. With view, map, and plan. d8°. 10/6 1861

CRUMLIN VIADUCT, 1862.

1862 113 **W**HEN the Crumlin Viaduct, 210 feet above the river, had joined the historic TAFF VALE RAILWAY with the NEWPORT and ABERGAVENNY, and opened the way to MERTHYR and CARDIFF, the Hon. Major FITZMAURICE spoke of it as THE HIGHEST VIADUCT IN THE WORLD. Mr. Maynard's book gives a very careful description (illustrated).

Maynard, H. N. *Handbook to Crumlin Viaduct*. d8° 7/6 1862

W. BRIDGES ADAMS.

1862 114 **M**R. ADAMS, the maker of the SAMUEL Steam Railway Carriages, gave some good Character Sketches in the pages below. He speaks of Murdock, Trevithick, Cugnot, Blenkinsopp, Gray, and especially of GEO. STEPHENSON, he deals with the "Civil *versus* Mechanical Engineer feeling, chats about permanent way and rolling stock, steam on highways, utility of speculators, Indian routes, light railways, curious lines, &c., &c.

Adams (W. Bridges) *Roads and Railroads*. 372pp. p8° 7/6 1862

BRIDGE RENEWALS.

1864 115 **M**R. J. DOWNIE in admiration of the very beautiful method adopted for RENEWING the NETHAN BRIDGE on the Lesmahagow line (Caledonian) wrote a paper in the Transactions of the Inst. of Engineers in Scotland. Vol VII. 5/ 1864

Communications with Guard or Driver.

1865 116 **3**N the paper below mention is made of an AXLE BREAKING under the carriage in which Mr. WM. BAKER, Engineer-in-Chief of the LONDON and NORTH WESTERN RAILWAY was

travelling, signalling to the driver being found impossible and DIFFERENT METHODS of communications are here pointed out by an officer of the Railway Dept. of the Board of Trade.

Tyler, Capt. On Circulation and Communication in Railway Trains. 20pp. and plate (Ex. from *Journal of Science*) 20pp. 8° 7/6 1865

RONEY'S RAMBLES.

368 117 SIR Cusack RONEY'S RAMBLES furnish chatty accounts of the RAILWAYS in AMERICA, on the CONTINENT, and in the Colonies. He has much to say on the POST OFFICE connection with Railways, describes famous existing and proposed TUNNELS, has some anecdotes of ROBT. STEPHENSON, and references to our GREAT LOCOMOTIVE WORKS and to CRAMPTON'S Locomotives, FELL'S CENTRE RAIL ENGINES (illustrated) etc. Sir Cusack, I believe, was once Secy. to a Co. opposing the formation of the G.N.R. and afterwards became the *Eastern Counties* Secretary.

Roney, Sir C. P. Rambles on Railways. 499pp. d8° 7/6 1868

NEW NARROW GAUGE.

369 118 MR. F. W. ARMSTRONG in compiling Facts and Opinions on NARROW GAUGE RAILWAYS gave the "*Times*" articles, reports on the FAIRLIE ENGINE, remarks on LIGHT RAILWAYS on the Continent and in America, NOTED INCLINES and WELSH RAILWAYS, with extracts from *Roy. Commissioner's Report 1857* and *Capt. Galton's Report to Board of Trade 1857*.

Facts and Opinions on Narrow Gauge Railways collected by the P. W. D. Central Provinces, June 1870. 167pp. roy 8° 15/ Priv. printed 1870

NEW NARROW GAUGE.

372 119 MR. Fairlie here replies to criticisms on the NEW NARROW GAUGE SYSTEM and describes the working of that system on various railways with his LOCOMOTIVES.

Fairlie, Robert F. Railways or No Railways. 144pp. with illustrations of locomotives etc. d8° 5/ 1872

Block System of Railways.

873] 120 THE Popular Science Review about 1873 contained an article on railway telegraphs, illustrated by a good plate (showing Improved Railway Signals) and well described the BLOCK SYSTEM.

Price. Railway Travelling and Electricity. 11 pp. 8° 3/6 circa 1873

PENNSYLVANNIAN PRACTICE. 1874.

374 121 A 66 paged pamphlet on the Pennsylvania Railroad was edited by Messrs. Fox and Forrest in 1874, and gives much practical information on AMERICAN RAILWAY CONSTRUCTION and MANAGEMENT. It is an excerpt from *Proceedings Civil Engs.*, Vol XXXIX. In it Mr. WEBB (the Nor.

Western's Engineer) says LOCOMOTIVE PRACTICE IN PENNSYLV. WAS ABOUT THE BEST TO BE SEEN IN AMERICA. Fox. Pennsylvania Railroad. 8° 5/ 1874

"The Finest Show" in England.

1889 122 **T**HERE is the biggest English production in the way of Railways—THE LONDON and NORTH WESTERN. Come and see the show, John Bull, I will prove to you that you have been very well treated. You would not like to ruin us by further demands, would you? And Sir Geo. FINDLAY here proceeds to explain the system to John Bull "down in the mouth."

Findlay, Sir George. *The Working and Management of an English Railway.* 300 pp. with numerous illustrations. 8° cloth. 4/6 1889

History of the Lines.

The Great Public Plate Railways.

Kilmarnock and Troon (10 miles).

1807 122a **T**HE "TROON RAILWAY" (made by Jessop) was, in its day, the most considerable in SCOTLAND. It was for this railway that the DUKE of PORTLAND gave the first outside order to STEPHENSON for a locomotive as early as 1817. It was the first public and locomotive railway in Scotland, and the following old chart of it (dated a year before its Act), is of no little interest. Of course, Geo. Stephenson's locomotives did not well agree with Mr. Jessop's plate rails.

Plan of the Kilmarnock and Troon Plate Railway.
3½ to m. Size 2-ft. × 8½ £2 2s

Gloucester and Cheltenham Railway.



1809 122b **I** do not put 1809 as the date of the medal. It was the year the Co. got its Act. What brought this old plate line carrying passengers with an Engine of Geo. Stephenson's "BLUCHER" type at any early or recent date I cannot tell. It might have been, but I doubt it. *The Engineer* had this very medal illustrated in their pages, and perhaps explained. Locomotives were used on the line at least before its incorporation with the Birmingham and Gloucester Ry. in 1839. It was to form a portion of James' Great Central Junction Ry. in 1820.

Gloucester and Cheltenham Railway Medal, as above in Bronze. £2 2s

HAY RAILWAY (24 miles).

- 1810** 122c **OF** the very early tramroads, the predecessors of railways, I have secured records of Nos. 6 7 and 11 of the "*British Almanac*" List. The one below is No. 11 one of the largest of the Welsh public plate lines of that date.
Hay Plate Railway. Wm. Crossley's Plan of the line from near Brecon to Parton Cross, Herefordshire.
 On vellum, 7-ft. by 18 inches. £5 5s 1810

The First Great Trunk Line ever proposed.

- 1810** 122d **SIR JOHN RENNIE** said Telford either did not believe in Railways, or pretended that he did not. But possibly he was disgusted over the result of one of his first big surveys. Even in 1824 long railroads or tramroads seemed unknown. But *fourteen years before* that date Telford had carefully surveyed a line one hundred and eighteen miles long reaching from "Baillie Clelland's Garden Wall" at Glasgow to the Quay at Berwick. He called it a "Cast Iron Railway." The gradients are most carefully shown and include two sharp inclines 75 and 24 miles from Glasgow. No line of equal length received an Act till twenty six years afterwards. It must I think have been by far the longest line ever proposed at that date and was possibly the first long line ever proposed in the world.
Telford's Plan for a Cast Iron Railway from Glasgow to Berwick. £10 10/ 1810

STRATFORD AND MORETON.

- 1821** 122e One of the best railway engineers about this time, says Mr. Ritchie, was the late Mr. Wm. James, of Warwick, who planned the first railway of any length in England: the Stratford and Moreton railway . . . completed in 1821 . . . 18½ miles in length. In 1825 Thomas Gray in his "*Observations*" quoted from "*The Courier*" that two Acts had been obtained, one for the "Stockton" the other for the "Stratford and Moreton Ry." each exceeding thirty miles, and it is intended to adopt the Locomotive. It is said that Mr. Rastrick opposed the adoption of the Loco here as well as at Liverpool. Passengers have been carried on it [*Brit. Almanac*] but it was a plate line [vide Act of 1833] though of wrought iron. The original Acts below show restrictions on its use and many important items connected with the only line that was then nearly the compeer of the Stockton and Darlington [see also under Stratford below].
Stratford and Moreton Railway. The Original Acts of 1821, 1825, and 1833. 3 folios. £5 5s 1821 etc.

Stroud and Severn Railroad.

- 1825** 122f **THE** origin of an extremely early portion of what is now part of the Great Western Railway may be seen in the pamphlet below in which the Canal interest calls for the abandonment of a projected locomotive railway from Stroud to Stonehouse etc. Interesting particulars are given of the line. It was referred to by Thos. Gray in his 1825 edition and subsequently became a part of the Cheltenham and Great Western.
The Stroud and Severn Rail-road; a Fallacy. 25pp. 8°
 Extremely rare. £3 3/ 1825

Proposed Passenger Routes.**The Stockton and Darlington.**

- 1823** 123 **OF** the first big passenger railway I have unfortunately no early reports but I have a memento of unusual interest in
 Published by Edward Baker, John Bright Street, Birmingham.

the plan of the line from Witton Park Colliery through Darlington to Stockton showing at various points little coloured sections, a gradient table etc. And the plan has come to me from the collection of Mr. John Dixon, a gentleman who first appears in railway history as the chief assistant of George Stephenson in making this, the first important, passenger railway.

Mr. John Dixon's Own Plan of the Stockton and Darlington Railway. (abt. 2ft. x 1). £3 3s 1823

London and Birmingham Railway. Original Project.

1824 125 "As early as 1824," says JEAFFRESON in his *Life of Robert Stephenson*, a proposal was made to lay down a railway between London and Birmingham." I am glad to be able to number even the rare document detailing this proposal among the collection. It was issued the same year as Sander's first prospectus of the Liverpool and Manchester line. The project was influentially supported, Matthias Attwood M.P. heading the London Committee and Robert Smith, the High Bailiff of Birm., the Birm. Committee. And three of the latter, Wm. Chance, J. F. Ledsam, and Jas. Foster came to be named as Proprietors in the subsequent Act. The little prospectus mentions Committeemen, puts the cost of the line at £1,200,000 and limited shares to a hundred each holder. It is one of the earliest papers connected with the promotion of what is now the London and North Western Railway System.

Prospectus of the London and Birmingham Railroad Co. folio. £5 5s 1824

NEWCASTLE and CARLISLE.

1825 125a **TO GO BACK** into railway history before the days of the LIVERPOOL and MANCHESTER RAILWAY is to go deep into railway antiquity. The brief REPORT below carries us back to a few months after the opening of the STOCKTON and DARLINGTON line, and throws the limelight on the proceedings of ONE OF THE FIRST OF IMPORTANT COMPANIES. The little document is the REPORT OF THE SUGGESTED ROUTE of the NEWCASTLE and CARLISLE RAILWAY Co., signed by, and bearing the autograph of the Chairman, Mr. JAMES LOSH, who was instrumental in procuring (and whose name appeared in) the first ACT of the present line (dated 1829). So old is the line that no railway magazines are old enough to record its early life, and though full of unusual interest the earliest accounts of it are almost unobtainable.

Newcastle and Carlisle Intended Railroad. A brief "Directors' Report" on Route. Extremely Rare. £5/5 1825

Liverpool and Manchester Railway.

1825 126 THE pamphlet below is one of the three on which the *Quarterly Review* founded its famous article in 1825. It describes the canal monopoly and their "exorbitant and unjust charges" and in stoutly advocating the railway suggested a speed of 10 or 12 miles an hour.

Sanders, Joseph. Letter on the projected Railroad between Liverpool and Manchester. 46pp. 8° sewn. 21/ [1825]

CANTERBURY AND WHITSTABLE.

1826 126a "THIS was the FIRST RAILWAY in the SOUTH of ENGLAND," says Wishaw, worked by Stationary and Locomotive Engines. It was projected by Wm. James and made by John Dixon and Mr. Locke on behalf of Geo. Stephenson. James was very sore about it. It was six miles long and was opened 3rd May, 1830. It had a Locomotive in 1831 but not in 1839. Below is an estimate with expected costs and receipts printed and dated April 6th, 1826, but with the autograph signatures of John Brent, Chairman, and John Dixon, Engineer, and it was among the latter's papers that the estimate was found.
Canterbury and Whitstable Railway Estimates,
 folio, being John Dixon's Own Copy, with his Autograph. £4 4s 1826

Sheffield and Peak Forest Railway.

1826 127 "WHEN a canal was proposed between SHEFFIELD and the PEAK FOREST CANAL Mr. SANDERSON wrote the paper below to SHOW THE SUPERIORITY OF AN EDGE RAILWAY "for passing over a mountainous district." He pointed out that LOCOMOTIVES COULD then ASCEND a gradient of 1 in 84, referred to the NEWCASTLE EXPERIMENTS, Mr. JESSOP'S Report, quoted NICHOLAS WOOD to describe a locomotive, spoke of a junction of this line with the *Cromford Railway*, and so on. But this stout old advocate of a railway over a canal was not so sure that "in the present state of commercial affairs *so large a sum as £160,000 could be raised for a speculative undertaking.*"
Sanderson, Henry. On the superiority of an Edge Railway to a Canal between Sheffield and Peak Forest Canal. 9pp. 12° £3/3 Sheffield 1826

Limerick to Waterford. Locos. with Turf Fuel.

1826 128 IRELAND has had a varied railway career. This line through the "GOLDEN VALE" was proposed when the Stockton line opened. Mr. Nimmo reports for a line with wrought iron bars supported upon stone blocks by iron chairs. He thinks locomotives will cost £600 each, but DOES NOT KNOW WHETHER TURF FUEL will suit them.
Nimmo, Alex. Report (to the Hibernian Railway Co.) on the Limerick and Waterford Railway. p8° Very Rare. £3/3 1826

Perth, Arbroath, and Montrose.

1827 128A BETWEEN the dates of the opening of the STOCKTON & DARLINGTON and the LIVERPOOL and MANCHESTER lines, the celebrated Scotch engineer, ROBERT STEVENSON, made a report for railways in the Perth, Arbroath, and Montrose districts. He considered that Locomotives might be used with advantage, and estimated for rails accordingly, even though the traffic was so desultory that horses would have to be used in the first instance.
Stevenson, Robt. Report relative to Railways from Perth, Arbroath, and Montrose into the Valley of Strathmore. With maps, shewing proposed lines from Perth to Forfar, Montrose, and Aberbrothwick, and connecting lines to Crieff and Stirling, and also to Dunfermline via Kirkaldy. 79pp. 4° £3/3 1827

Leeds, Selby, and Hull Railway.

- 1827-9** 129 **MR. HILL** says he was well known in **LEEDS** for his advocacy of a railway to **HULL**. He **DID NOT BELIEVE IN LOCOMOTIVES** and so he proposed a line different to one surveyed for their use two years before. But he was well informed on **EARLY PROPOSED RAILWAYS**, and his criticisms of the **STOCKTON and DARLINGTON, LIVERPOOL and MANCHESTER**, of the proposed **NORFOLK LINE**, of the **GARNKIRK and GLASGOW Co.'s SUPPORT** of **LOCOMOTIVES**, and even his own proposals for carriages capable of running on or off the line, and his statement that *it is not safe to work locomotives in the dark (at night)* all go to form *one of the most valuable old contributions to the history of the introduction of locomotives on railways.* **HILL, Thos.** Treatise upon the Utility of a **RAILWAY** from **LEEDS to SELBY and HULL**. 32pp. 1827. With a **SUPPLEMENT** (16pp.) to show that **HORSES** would be better than **Locomotives** on the **Manchester** and on the **Selby Railways** (1829). £3/3

GRAND JUNCTION.

- 1830** 129a **THE** Plan and Section below take the line only from **LIVERPOOL to CHORLTON**. It will be seen, however, from *Freeling's Guide* that after the first Company had lost a Bill for making the line they "gave up" and when the project was renewed four years later it was arranged that the **Liverpool Committee** should apply for an Act from **Liverpool to Chorlton** and the **Birm. Committee** for a line from **Birm. to Chorlton**. And for the third time **Parliament** rejected it. The **Canal Companies** opposing because of a bridge over the **Mersey** well shown in the beautifully executed plan below. **Geo. Stephenson** and **Locke** were the engineers and it is signed by the former [*Vide "Descriptions" and "Guides."*] **Plan and Section of an Intended Railway from Liverpool to Chorlton . . . A portion of a projected Railway from Liverpool to Birmingham.** About 7-feet by 2. £5 5/ [1830]

Newcastle and Carlisle Railway.

- 1830** 130 **"THE NORTHERN YEAR BOOK"** describes a public meeting at **NEWCASTLE-ON-TYNE** on the 18th Feb. at which **JAMES LOSH** made a long and well received speech (5pp. report given) advocating the above line. A **Parliamentary Petition** was drawn up and apparently by the 22 May following the Act was passed, and later on in the book are given **THE 182 CLAUSES OF THE ACT** (after the Royal assent) the sixth clause stipulating **THAT NO LOCOMOTIVES SHALL BE USED.** **Northern Year Book** for 1829. 21/ 1830

LONDON AND GREENWICH.

- 1832** 130a **THE** year before **London** got the Act for its first Railway **Mr. LLOYD** published a **Coloured Plan** showing its course across the various streets together with a view of a dozen of the **Thousand Arches** on which the line was to be made. **Coloured Plan of the Greenwich Line.** About 2½ feet by 1½ £3 3s 1832

Midland Counties Ry.**(ORIGIN OF THE MIDLAND).**

1833 131 **3** T is with considerable satisfaction that I draw attention below to some of the FIRST OFFICIAL RECORDS of what is now THE MIDLAND RAILWAY COMPANY. The opening pages of Williams' *Rise and Progress of the Midland Line* will call to mind the "little group of plain practical men . . . deep in mines, in counsel, and in pocket" who used to meet at "THE SUN" at EASTWOOD and who on the 14th October 1832 resolved after due deliberation to lay a railway from PINXTON to LEICESTER.

The pages below open with one of the resolutions passed that day for a Committee to disseminate a knowledge of the advantages of the railway. And dating from Alfreton 15 Oct. 1832 they proceed so to do in 42 pages affixing the famous MR. JESSOP'S REPORT and a CAPITAL MAP of the DISTRICT. ADDED to the pages is the PROSPECTUS of the Co. *as it stood two years later* and on this prospectus are the names of the patrons, the very large PROVISIONAL COMMITTEE classified under LEICESTERSHIRE, NOTTINGHAMSHIRE and DERBYSHIRE the big DIRECTING COMMITTEE (Mr. BABBINGTON, Chairman) the nine bankers, three solicitors, with GEORGE RENNIE, Engineer and J. F. BELL (of Leicester) Secretary. MR. RENNIE'S REPORT (included) was dated 26 Nov. 1834. The capital was £600,000 and the object of the Co. was to connect the Metropolis with the Northern Districts (and primarily with Notts, Derbyshire and Leicestershire). The length 69 miles. Mr. Rennie mentions his report of 27 Nov. 1833 and one of the 30th June 1833 and the present one appears to supply a missing link not mentioned by Mr. Williams. Additional interest too is lent to this prospectus by its assertion that *except by subdivision no project to connect the Metropolis with the North will ever be accomplished* and that NO LINE EASTWARD OF IT WILL EVER EXTEND FROM LONDON SO FAR TO THE NORTH AS LINCOLN."

Midland Counties Railway. Prospectus of the Pinxton and Leicestershire (42pp. 2 maps 1833) and also of the Line from Rugby *via* Leicester to Long Eaton and thence to Pinxton, Derby and Nottingham. (1834 4pp. folio). Altogether 46 pages. Extremely rare. £77/

Great Western Railway.—The First Bill.

1834 132 **3** N connection with the first attempt of the G. W. R. to get an Act for a line from LONDON to READING and from BATH to BRISTOL we have below extracts from the evidence for that Bill, and the replies of Mr. WALKER (Mayor of Bristol), various tradesmen on the line, BRUNEL, Geo. STEPHENSON, James WALKER, H. R. PALMER, C. A. SAUNDERS, Joseph PEASE, Joseph LOCKE and others arranged so as to give the ORIGIN of the UNDERTAKING, its expected ADVANTAGES, FACILITIES, COSTS, etc. A preface affixed by the Directors. It is ONE of the EARLIEST OF THE G. W. R. PROMOTION RECORDS.

Extracts from the Commons Committee Evidence on the Great Western Railway Bill. 52 pp. £3 3/

Bristol, 1834

London and Birmingham Railway Plan.

1835 132a Two months after the Act had been obtained for the ex-

Published by Edward Baker, John Bright Street, Birmingham.

tension of the line from CAMDEN TOWN to EUSTON, and two years before any part of the line was opened, Mr. CHEFFINS published the MAP and SECTION below, with facsimile signature, "Robert Stephenson, Engineer," with plans showing the Birmingham and London Depots. The G.W.R. is here shown as joining this line at Wormwood Scrubs. (Section "Datum" not located.)

London and Birmingham Ry. Cheffins' Plan and Section folded into case. Scale 1m. to $\frac{1}{2}$ in. 21/ 1835

Cundy's Opposition to the Midland Counties Ry.

1835 133 JUST when the "MIDLAND COUNTIES" was being brought to a successful issue the extraordinary CUNDY appeared on the scene. It was he who had a proposed rod in pickle for the "MIDLAND" as a through line in the shape of his projected "GRAND NORTHERN" from LONDON to LINCOLN and YORK, and Mr. BABINGTON, Chairman of the "Midland Counties," here replied to some "Observations" of his.

The cost of the Birm. line would make fares dear to London said Mr. Cundy, which Mr. B. denied, adding however that EVERY Co. charged "as high as was consistent with prudence." Further on he remarks that the "GRAND NORTHERN" Co. had been formed nearly 10 years ago and suggests that Mr. CUNDY was now "seeking to obtain the remains of its almost forgotten deposits." The "MIDLAND COUNTIES," on the other hand, had received applications for shares up to one third of its capital. [The *Mid. Count.* first ACT was obtained 21 June, 1836.]

Babington's Letters in Reply to Cundy. 14 pp. £2 2/ Leicester, 1835

MIDLAND COUNTIES RAILWAY.

1835 133a BELOW is a copy of the Book of References dated Nov. 28, 1835, and signed "Charles Vignoles, Engineer," showing the names of owners and tenants through whose property this first portion of the Midland system was made.

Midland Counties Railway Reference Book. 87 pp. obl. 4° Very Rare, £3 3/ 1835

The London Grand Junction Railway.

1835 133b THE report below takes us back to the days when the LONDON and BIRMINGHAM Railway meant to end at CAMDEN TOWN (London) and to be joined there by the GREAT WESTERN from Bristol. And this was to be the Junction line to take passengers on to near FARRINGTON STREET.

The report speaks of the disadvantages of the distant Birmingham line terminus, and of making this line in a deep trench as first proposed. Instead of that idea of Mr. Remington's, says George Rennie, I propose to make a railway on arches, like the Greenwich. The Roman and Lisbon Aquaducts we cannot equal in magnificence, but we can make ours an ornament. A plan of the line is given, and a realistic view of a terminus of magnificent proportions. In March, 1837, the *Mechanics' Magazine* announced that the line had been commenced with considerable spirit at a certain spot, but see *Ry. Times*, 1838 to 1843.

The London Grand Junction Railway Report, dated 20th November, 1835. Folio. £3 3s

London and Brighton Railway.

1836 134 AN interesting historical examination, over the earliest proposed line to Brighton, will be found in the LONDON and BRIGHTON RAILWAY BILL EVIDENCE before Ho. of Commons Committee.

Mr. ROBT. STEPHENSON states that his father was *not the original projector*—but the EXECUTOR—of the LIV. and MAN. RAILWAY; gives remarkable evidence as to the INFLUENCE of GRADIENTS. SIR JOHN RENNIE claims that the MANCHESTER and LIVERPOOL RAILWAY was carried out in a great measure according to HIS, and his father's ORIGINAL DESIGN, asserts they could have made it at FAR LESS EXPENSE, that he was employed in 1826 to explore a line for the Great London and Birmingham Railway Co., and in 1825 was employed for a survey by a Co. called the Surrey, Sussex, Hants, Wilts, and Somerset Ry., mentions four or five other early projects, that he LOST over £3,000 by them in 1834, and that his plans for a Brighton Railway had been submitted, without his consent, to Mr. Robert Stephenson “whom he did not consider a proper judge of such plans.”

London and Brighton Railway Bills Evidence, by Robert Stephenson, Geo. B. Bidder, Sir John Rennie and Joseph Locke. 454 pp, d8° cl. 42/ 1836

Great Central Railway—Dublin to Longford.

1836 135 MR. Nimmo reported in 1836 for a line to LONGFORD to be called the “GREAT CENTRAL IRISH RAILWAY.” This is a report on the ROUTE and GRADIENTS.
Nimmo's Report for a Great Central Irish Railway.
 p8° 21/ 1836

Newcastle and North Shields.

1835 135a WILSHAW gives a good description of this line in his work on the *Railways of Great Britain*. It appears to have been executed with great skill by Mr. ROBT. NICHOLSON who made the original survey given in the Plan and Sections below. The line cost £36,000 per mile, the Ouse Burn and Willington Dean Viaducts about £24,000 each (£1,000 being the cost of an ordinary turnpike bridge 16ft. high). £14,000 was saved at the time by using wood for stone. The line was the second modern passenger one made in the ancient birthplace of railways.
Mr. Nicholson's Plan and Section of a proposed Railway from Newcastle to North Shields [and Tynemouth]
 abt. 2ft. x 18in. £2 2/ 1835

Grand Junction. Locke's Plan.

1836 136 THREE years after the Act, and a year before the opening, the PLAN and SECTION below was published by order of the Directors. It bore LOCKE's name as engineer. It showed the outline of the CHESHIRE JUNC. original route to where Crewe now is (but not the South Union), the Sheffield and Rotherham, and the three Midland lines (the Derby having its two junctions with the London line).

Grand Junction Official Map with Section (datum from Liverpool Low Water). Scale 1m. to ½in. Folded into 4to. 42/- 1836

Route to Ireland. Portdynllaen.

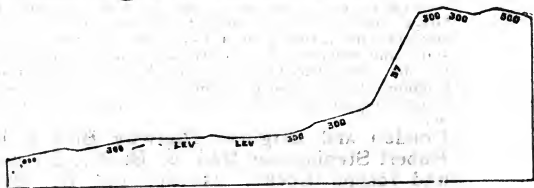
1836 137 THE best route from IRELAND to LONDON, especially after the UNION was a matter of the highest importance. It was a far harder journey from Dublin to London then than it is from St. Petersburg to London now.

In 1807 HOLYHEAD was considered by many to have irremediable defects as a port and PORTDYNLLAEN in Carnarvonshire received great consideration for over thirty years. The ‘Brief Sketch’ below strongly advocates the latter. *It speaks of a speed of 30, and proposes*

doing the journey IN TWELVE HOURS by Worcester and Oxford
(or by North Wales Coast and Grand Junction).

Brief Sketch of a New Line between Dublin and London (via Portdynllaen). 40 pp. p8° £2 2/ 1836

Birmingham and Gloucester.



LICKEY INCLINE.

The above will give an idea of the proportions of the Incline for which the Americans made us the locomotives in 1839.

Birmingham and Gloucester.

1836 137a This line is noteworthy for several reasons. The original surveying of it was, says Mr. Williams, the first work Brunel ever did. It was another Quaker's line. It engaged its engineer on "no success, no pay" terms, and had to avoid all important towns to save expense. And it had on it the famous Lickey Incline which Brunel and Stephenson declared it was impossible to ascend with locomotives, and for which therefore Capt. Moorsom was compelled to order bogie engines from Norris of Philadelphia. Below is a copy of its original Bill, famous in railway history as being the first ever sanctioned the first time it was submitted to Parliament.

Birmingham and Gloucester. Original Bill. 165pp.
Folio, hf. cf. £2 5/ [1836]

Great North of England.

1836 137b THE Great North of England Ry. was the earliest portion of the East Coast Route. Below is Mr. Thos. Storey's Report to the Provisional Committee for its construction. Its MAP shows the line from York to Newcastle (though it was never made beyond Darlington). The "East London Ry." is the projected southern connection and a projected line extends north to Morpeth. The Stockton, Stanhope, Clarence, Whitby, Durham and Sunderland, So. Shields, and Hartlepool, and Leeds and Selby Railways are shown as "going concerns."

Storey's Report of the Gt. North of England Railway
25 pp. d8° £2 5/ 1836

Manchester's Rival to the Grand Junction.

1837 137c Particulars of this line are given in *Observations on Principal Railways*, 1838, and in *Wishaw's Analysis* of 1837. It was to join the Birmingham and Derby at Tamworth. GEO. STEPHENSON and BIDDER were the engineers, and the Bill for it was, I believe, thrown out because a barn of the value of £10 was shown in one plan and not in another! The North Staffordshire and Trent Valley lines run partly over the route. It was always shown in early *Bradshaw's* (in outline) as the Manchester and Birmingham Railway and its extension. (But vide Map in *Mech. Magazine*, vol. xxviii.) It was Manchester's attempt to get a rival route (to Grand Junction) towards London and Birmingham.

Atlas (with 18 maps) of the Plan of the proposed Manchester South Union Railway, 16in. x 14in. £2 2/[1837]

London and Birmingham Ry. (Early Stipulations).

1837 138-9 **THE** first act (1833) of the Birm. Line was to run from Birm. to CAMDEN TOWN; the second (1835) to extend to EUSTON; the third to borrow £1,000,000 extra. The Act stipulated (i.a.) that OWNER'S NAMES should be painted on Carriages; that proper CONSTABLES should be appointed; that Engines should consume their own SMOKE; that there should be "Milestones" every quarter mile, or failing them, NO CHARGE FOR CARRIAGE.

London and Birmingham Ry. The first three Acts.

8° An original copy. 10/6 1837
 ——— The First Act. folio. (Reprinted 1883) 2/6

Hampshire and Wiltshire Railway.

1837 140 **AN** interesting little item of the SOUTH WESTERN system will be found below in the FIRST PROPOSAL MADE TO CONNECT SOUTHAMPTON WITH SALISBURY by the HAMPSHIRE and WILTSHIRE RAILWAY (described in Wishaw's Analysis of 1837). Its Engineers were GILES and E. O. TREGELLIS. Its Committee included Colonel HENDERSON, James LACY, Henry KING, and Wm. REID. The map shows the G.W.R. and Southampton lines, and among projects STEPHENSON'S LINE to BRIGHTON, lines from BASINGSTOKE *via Salisbury* to BATH and EXETER, and a Coast line from North of Southampton to Brighton. *Colonel Henderson* was subsequently a South Western Director.

Prospectus of the Hampshire and Wiltshire Junction Railway, with map, £2 2/ 1837

Dublin and Kilkenny Railway.

1838 141 **IN** 1838 objection was taken to the dispositions shown in the SECOND REPORT, *to make the Irish Railways State Railways*, and the pages below were written by a Shareholder in the DUBLIN and KILKENNY RY., which had received its Act as a plea for his line (via Carlow instead of via Maryboro').

Letter to Marquis Landsdowne. By a Shareholder in the Kilkenny Railway. 37 pp. 8° 10/6 1838

The First Italian Railway.

1837 141a **ACCORDING** to Dr. LARDNER's list the NAPLES and PORTICO line was the first Italian railway and opened Oct. 1839 and the line from Portico to Castelmare with branch to Nocera (21 miles) followed. Below is the first prospectus. "*Cette brochure a paru en 1837*" says the gentleman who sold it me. It embraces both lines and Pompeii is a station on the latter. **Société du chemin de fer de Naples et a Castellammare** Prospectus. 16pp. 4° with good map. wrappers. £2 2/ 1837

Second Great Project for Italy.

1837-8 141b **"ONE** of the most stupendous works of modern times" said *The Literary World* in 1839 "is a projected railroad from VENICE to MILAN connecting the seven richest and most populous cities of Italy with each other." Its length was to be about 166 miles and it was expected to be able to take 1800 persons, 1500 tons of goods, and 1000 tons of coal daily. The prospectus was published in Italian at Venice in 1837 and a short Appendix in

1838. The map shows routes and has illustrations of trains "*di primo rango*," "*di secondo rango*," "*delle merci*" and "*del bestiame*." The date is that of our own first Great Trunk lines.

Strada Ferrata da Venezio a Milano (Prospectus etc.)

88pp. 4° wr. £2 2/

1837-8

Irish Railways Commissioners' Second Report.

1838 142 **FROM** early reports such as the one below (ISSUED THE YEAR THAT LONDON WAS FIRST CONNECTED BY RAILWAY WITH THE NORTH) we get a glimpse of the railway system and the railways just after they had achieved a decided success. The ENGINES we are told weigh 10 to 13 tons, the EXPENSE for ENGINE POWER is on the LIV. and MAN. line a quarter of the total expense (p. 89) the STOCKTON and DARLN. Ry. had QUADRUPLED the LOCAL TRAFFIC, and so on. The questions of GAUGE, of GRADIENT, CURVES. POWER of LOCOMOTIVES, etc., are all gone into, and furnish a little mine of information. A capital atlas showing the then Irish and English Railways, etc., is mentioned further on.

Irish Railway Commissioners' Second Report.

Abridged Edition. 213 pp. 2 maps. d8° cloth.

Very scarce. 25/

1838

1838 142a **THE UNABRIDGED EDN.,** *thick folio*, VERY RARE. £3 3/

1838

Birmingham's Committee for Irish Rys.

1838 143 **AT THE END** of 1838 a GENERAL RAILWAY COMMITTEE was appointed at the suggestion of THOS. BIRMINGHAM, Esq. to take proposed railways into consideration. It advocated recourse to the LOAN SYSTEM suggested by a *Commons' Select Committee* in 1835 for a Govt. loan of a million sterling. Of lines commended by them those to BELFAST, GALWAY, KILKENNY and from LIMERICK to WATERFORD were carried out by 1853.

First Report of General Railway Committee [Birmingham's]. 23 pp. and map. p8° 21/

1838

Route to Ireland—Holyhead by Geo. Stephenson.

1839 144 **GEORGE STEPHENSON** was altogether opposed to PORTDYNLLAEN, and in the following report compares the difficulties of the two routes in favour of HOLYHEAD. The illustrious engineer finding such difficulties as these forms a strange contrast to the facilities by which the famous FESTINIOG line is now worked hard by the then impossible route. It is the only original report I have of GEORGE STEPHENSON'S.

Stephenson, George. Report to Chester and Crewe Railway Directors on the Holyhead and Portdynlleuan Routes. p8° half calf. £2 2/

[1839]

The Irish Head Bricklayers Proposed Line.

1841 145 **BENJAMIN PEMBERTON**, "*Master of the Corporation of Bricklayers and Plasterers*," had blossomed into a full blown Civil Engineer, possibly on the strength of his suggestion for a Railway from DUBLIN to TRIM which,

together with the idea of the "GREAT CENTRAL" or "GRAND JUNCTION IRISH," Mr. VIGNOLES and the Irish Commissioners seemed to be about to treat with considerable disrespect. In this address to his supporters mention is made of Mr. Vignoles' proposed "Quixotic COLONNADE" to the Kingstown Railway; and a two hours' interview with the great TELFORD.

Pemberton's Address on Railway Communication to the West of Ireland. 8° 21/ 1841

Irish State Railways.—Coal and Coke.

381 146 MR. BIRMINGHAM collected statistical evidence in favour of Railways in Ireland being worked by the State to avoid ACCIDENTS, then frequent, and to save PARLIAMENTARY EXPENSES. BELGIAN cheap fares and security from accidents referred to, as also extra EMPLOYMENT, in favour of the undertaking. Mr. DRUMMOND is quoted to show "goods might be a source of revenue as well as Passengers." COAL is spoken of as only useful TO RUN 6 TO 8 MILES AN HOUR at £700 per ANNUM per ENGINE, COKE would COST £1200 to £2000 and at a speed of 30 MILES AN HOUR. Birmingham, Thos. Statistical Evidence for State Railways in Ireland. 8° 21/ 1841

North Midland, Great Northern, &c.

344 146b The method of promoting a branch line under the auspices of Mr. GEORGE HUDSON, the RAILWAY KING, is well shown in the fine series of autograph letters below. Many companies at the time were seeking for Lincolnshire traffic, the various London and York companies were seeking to get the traffic with the South, and the Manchester and Leeds, the North Midland and others the traffic from Yorkshire. Mr. J. N. Brogden, of Lincoln, owner of a newspaper called *The Locomotive*, seems to have been appointed by the North Midland their chief Lincoln promoter of a line from Swinton to Lincoln, and the letters include Mr. Hudson's authority to him "to incur any reasonable or moderate expense," numerous letters from Mr. Joseph Guy, of Gainsboro', a letter from Mr. Richard Elleson (afterwards a Gt. Northern Director), letter from Brogden to Guy for Mr. Hudson hinting at a grand jollification feasting, inspection of the line, &c.

THERE are also Letters from the Eastern Counties Co., Captain Lawes, Mr. Close, and some touching the London lines, Mr. W. Richardson, of London (for Mr. Hudson) speaking of "strangling in its birth the monster infant" *THE DIRECT NORTHERN* which had just then been sanctioned, a letter from Mr. [after Sir] Cussack Roney Secy. of Cambridge and Lincoln Railway, May, 1845, from Mr. R. C. Moon over the Fosdyke Navigation and the famous "Loop." Included also are Mr. Brogden's little bill against the North Midland for £241 for promotion, an autograph letter from Mr. Hudson as follows:—

My dear Sir,

York, 30 Sept. 1844.

We certainly intend to make a line from Cambridge to Lincoln. I have no objection to unite with any party in making it. This you must treat as perfectly confidential.—I am, yours, etc., [signed], Geo. Hudson.

and many letters of great interest in connection with Mr. Hudson, the Great Northern and the Yorkshire, Lincolnshire, and North Midland Railways at date.

An Album of 125 Letters Addressed to Mr. Brogden, of Lincoln, relating to Mr. Hudson, the Origin of the Gt. Northern, etc. £5 5/ 1844-5

WEAR VALLEY RAILWAY.

- 1844** 146c **Mr. Dixon** seems to have retired from the BIRMINGHAM and DERBY line possibly on its amalgamation into the Midland, and below is his plan for the WEAR VALLEY line found among his papers.

Wear Valley Railway. Coloured Plan and section of intended line and of the Bishopley Branch. 4ft. \times 2½ 10/6
1844

London and Birm.—Northampton and Peterbroro Railway.

- 1844** 146d **JN** early days NORTHAMPTON was on the direct road from LONDON to PETERBORO. The little line joining the two towns was opened in June 1845 (*vide Railway Chronicle* June 7th). It was the second branch of the LONDON and BIRM. whose Directors went down to open the "SINGLE WAY TELEGRAPH LINE." The following pages are remarks on the Commons Committee Report.

Northampton and Peterboro Railway Bill. 8° 10/6
[circa 1844]

Irish Railways (Possible Merchandise Traffic.)

- 1845** 147 **J** FROM this little publication we get a very clear description and criticism of the famous RAILWAY DEPARTMENT of the BOARD of TRADE, and of the IRISH RAILWAYS *proposed up to this date*. It states that English competition by *canals and carriers* is so great that Railways probably pay only ONE per cent. on Merchandise traffic.

Irish Railways and the Board of Trade, with map.
66 pp. p8° 15/ 1845

Two Routes. Dublin to Belfast.

- 1845** 148 **JN** choosing the route from BELFAST to DUBLIN an INLAND line via ARMAGH was spoken of in opposition to the direct line. Mr. H. L. LINDSAY, C.E., of Armagh, was a stout supporter of the former and considered it would be BETTER to FORFEIT £700,000 to the DROGHEDA COMPANY THAN MAKE THEIRS THE MAIN LINE.

[Lindsay] **Railway Communication from Dublin to the North.** 8° 15/ 1845

Metropolitan Termini.

- 1846** 149 **"WILL THE EXTENSION OF RAILWAYS into the Centre of the METROPOLIS afford sufficient benefit to the PUBLIC to COMPENSATE for the SACRIFICE of PROPERTY, the Interruption of Important Thoroughfares, and Interference with other Plans of Improvement"** became a leading question in 1846. A Railway Commission was appointed and this volume gives the Coloured Plans, etc., of proposals put forward by the different railways.

Maps, Plans, etc., of Metropolitan Railways. Very rare. 42/ 1846

WESTERN INDIA.

- 1846** 150 **THE** English Government authorized the construction of two lines of railway in India in 1849. Three years previously Mr. WILLIAMSON, at the request of the GREAT INDIAN

PENINSULAR RAILWAY Co., of which Lord Wharncliffe was Chairman, published these 38 pages, pointing out the military and commercial importance of the proposed line.

Williamson, Thos. (of Bombay). *Two Letters on Railway Communication in Western India.* 8° half calf. 10/6 London 1846

A GREAT COAL RAILWAY.

1846 151 **A BOLD SUGGESTION** in 1846 produced excitement even among SAILORS. Some influential men proposed a GREAT RAILWAY from NEWCASTLE ON TYNE to LONDON (going on a principle supported by the *Board of Trade* to separate Passengers from Goods). So alarming was the suggestion that the following 40 paged *brochure* was published to show its national danger. 10,000 BRITISH SAILORS "*sea bred and element nursed*" it said would be *discharged* and "supplemented by ENGINE DRIVERS and STOKERS," (!) and the names of the unpatriotic promoters were named for universal execration. It was probably the *largest English mineral railway ever proposed.*
Ships and Railways. 8° 10/6 Longman 1846

EASTERN INDIA.

1846 152-3 **MR. ANDREW** was perhaps the earliest authority on Indian Railways. In connecting Calcutta with the far north west he proposed using the GANGES NAVIGATION for the southern part and his opinions prevailed on the Commissioners. He analysed the railway capabilities of INDIA, and criticised the different railways proposed.

In a third edition he added considerably to the work, and the *Observer* spoke of it as of inestimable value.

[Andrew, W.P.] *Indian Railways.* By an Old Indian Postmaster. 2nd ed. 171pp. d8° 10/6 1846

— 3rd ed. 150pp. d8° 10/6 1848

Workington and Cockermouth Railway.

1848 153a **BELOW** is a plan of the COCKERMOUTH & WORKINGTON Railway formerly in the possession of Mr. JOHN DIXON. It is undated and I think *may* be earlier than 1848.

Plan showing route of Cockermouth Railway.
Mr. Dixon's Copy. 10/ [circa 1848]

Eastern India and Sir Macdonald Stephenson.

1848 154 **IN** 1848 the EAST INDIAN and the GREAT WESTERN were almost the sole survivors of the projected Bengal railways. Mr. MACDONALD STEPHENSON had desired MR. BOURNE to enquire into the probable traffic and profits of the EAST INDIAN LINE. This he did (also taking in other railways) and came to the conclusion that as money could bring a safe 8% in India *highroads must be used to make railways at less cost and at greater profit.*

Bourne, John, C.E. *Railways in India.* 127pp. d8° 10/6 1848

WEST CORK RAILWAYS.

1850 155 **NINETY** little printed plates below give particulars of the sections, with OWNER'S NAME, etc.

Conybeare's Land Plans and Contract Sections on the West Cork Railways. Oblong 8° 5/ [Circa 1850]

Published by Edward Baker, John Bright Street, Birmingham.

IRELAND (Interesting Estimates).

- 1849 156 J. N. advocating railways for Ireland the following pages gave a detailed estimate for CONSTRUCTION at £9000 PER MILE, pointed to the enormous fish traffic increase of Birmingham since 1827, said that railways COULD INCREASE VALUE OF A 200 ACRE FARM £100 PER AN., and estimated taxation of English railways at £7 to £13 per acre. Advocated BEREHAVEN as a harbour.
Preston, G. P., C.E. Letter to Lord Russell on Expediency of Railways in Ireland. 4opp. loose. 5/ 1849

European and North American Railway.

- 1850 157 THE YEAR before the State of Maine became the Teetotallers' Paradise the people of PORTLAND petitioned their legislature to make enquiries as to the feasibility of a railway through MAINE and A LINE OF STEAMERS from NOVA SCOTIA to the new Midland Great Western Railway of Ireland at GALWAY. The Petition, a full account of the succeeding GREAT RAILROAD CONVENTION of July 31, 1850, at Portland, local meetings, correspondence, proposal of the *European and North American Railway* (now the ST. JOHN and MAINE RAILWAY), and its Act, together with the opinions of all leading Americans concerned, make up 172 pages of considerable historical interest.
Plan for Shortening New York and London Passage, Proceedings of Railway Commission, and Charter etc. of European and North American Railway. 25/ Portland 1850

INDIAN RAILWAYS. (Samuel's Carriages).

- 1850 158 THE author of the work below thought railways would not act as a panacea for the ills of the COTTON TRADE; he thought certain deviations of the GREAT PENINSULA RY. essential as also certain modifications of construction, INCLUDING THE USE OF MR. SAMUEL'S FAMOUS LITTLE STEAM CARRIAGE (as first run on *Eastern Counties Railway*). He objected to twenty tons of dead weight for one of paying load.
Grant, Lt. Col. Bombay Cotton and Indian Railways. 15opp. and map. 15/ 1850

OTHER FAMOUS ROUTES.

AMONG WORKS RELATING TO OTHER FAMOUS PROPOSED ROUTES ARE :

- 1852 159 WILLIAMS, J. J. *The Isthmus of TEHUANTEPIC*, being results of a survey for a railroad between the Atlantic and Pacific. 295pp. With coloured plates, d8° 10/6 1852
1857 160 ANDREW, W. O. *Memoir of the EUPHRATES VALLEY ROUTE*. 267pp. With map. d8° 10/6 1857
1857 161 Forrester, Thos. On a proposed railway from the TCHERNAVODA (on the Danube) to KUSTENDJIE (on the Black Sea). Coloured frontispiece, map, etc. 226pp. d8° 7/6 1857

INDIA. (Andrew v. Stephenson).

- 1853 162 In the work below Mr. Andrew opposes the East Indian

Railway as suggested by Mr. Macdonald Stephenson and supported by the Commissioners.
Andrew, W. P. Railways in Bengal. 49pp. 8° 7/6 1853
Bristol and South Wales.

1845 162A THE atlas below shows the plan and section of the Junction line to join BRISTOL with SOUTH WALES and to get over the round-about route *via* GLOUCESTER. Its Company was amalgamated with the G.T. WESTERN in 1868. **Bristol, South Wales & Southampton Union Railway.** Mr. Blackwell's Atlas of twelve plates giving Plan and Section and dated Nov. 1854. Abt. 24" x 18". 25/ 1854

Grand Trunk Railway of Canada. The St Lawrence Bridge.

1856 162B The pages below give Mr. Liddell's report for a bridge over the St. Lawrence to cost no more than £400,000, and the counter reports of ROBERT STEPHENSON, I. K. BRUNEL, CLARK and MOSS for the VICTORIA BRIDGE to cost £1,400,000.
Calmont. R. Letter to the Shareholders and the above Reports on the St. Lawrence Bridge. 77pp. 4° wrappers. 10/6 1856

Stratford-upon-Avon Railway.

1856 162C WHEN the proposal came for making the STRATFORD line from Hatton it was also proposed that passenger trains should run over the old STRATFORD and MORETON line to join at Moreton what was at that time the *Oxford, Worcester and Wolverhampton Ry.* There was to be a little branch to Shipston and thus James' project for the first big English railway (from Stratford to London) would have been at work as far as Oxford.
Prospectus of Stratford Railway (containing long list of Promoters etc.) and map showing proposed course and connections). 21/ 1856

INDIA. Stephenson's Triumph.

1857 163 AT the time of the INDIAN MUTINY Mr. HYDE CLARKE, *who laid down a system of TELEGRAPHS in India in 1849* wrote advocating the NORTHERN BENGAL RAILWAY, of which and the whole BENGAL system Sir MACDONALD STEPHENSON was the first projector (as was Mr. JOHN CHAPMAN of the BOMBAY, and Mr. J. H. HEATH of the MADRAS systems) and showed that railways had been after all able to compete with rivers, and practically proved that GEORGE STEPHENSON'S NAMESAKE *had been, and was, the greatest authority for Indian Railways.*
Clarke, Hyde. Colonization, Defence, and Railways in our Indian Empire. With map. 244pp. d8° 10/6 1857

INDIA Kottree and Mooltan.

1869 164 MANY years after his first work Mr. Andrew wrote on the *Indian Railway System*, particularly advocating the completion of the "*Missing Link*" between Kottree and Mooltan.
Andrew, W. P. Letter to the Secretary for India on the
Published by Edward Baker, John Bright Street, Birmingham.

completion of the Indus Valley Railway System. 124pp.
maps. 5/ 1869

EUPHRATES VALLEY ROUTE.

- 1876 165 THE following pages give a popular account by one who watched the course of events since Andrew's proposal of 1857.
McBean, S. England . . . and India connected by a Railway. 143pp. and map. p8° 4/6 1876

Descriptions of the Lines, Views, Pictures, &c.

Blenkinsopp Engine.

- 1811 165a A VIEW of a BLENKINSOPP'S LOCOMOTIVE pulling three coal waggons is shown below.
Blenkinsopp's Loco mounted and framed in black and gold frame 12" x 10" 21/

Large Photos of Early Locomotives, etc.

- 165b THESE include Stockton and Darlington's "LOCOMOTION" the same Co.'s "BELLE VUE" 1859 and The LOWTHER, the famous old Wylam Loco PUFFING BILLY and three other photos from same owner.
Seven Large Photos of Locos etc. Mounted 15 x 12 21/

Stockton and Darlington Railway. (Photos).

- 1825 165c THE notice of the OPENING to take place on 27th Sept. 1825 and also the notice that the "EXPERIMENT" Coach which commenced travelling 10 Oct. 1825 will continue to run daily, appear on two photographs mounted on a card below.
Card with Photographs of Stockton and Darlington First Notices (mounted) 14" x 10½" 10/

Birm. and Liverpool Railroad (Engraving).

- 1825 165d THE little scene below represented what *was* to be when the BIRMINGHAM and LIVERPOOL RAILROAD CO. HAD succeeded in getting their Act and in making their line. The artist has here given a picturesque country bright with the varied tints of hills, woods, streams, and cottages past which two trains are passing one a few yards after the other. The locomotives are apparently consuming their own smoke and all details of cranks are omitted but the engine driver lolls in a kind of hammock between the engine and the water barrel wagon (far from any guiding rod) while other waggons are carrying flour, cotton, soldiers, cannon, baggage, cattle and other merchandize, the passengers only place being on the top of the baggage. Two spectators stand close to the line. The date of the picture is even before the date of opening of the Stockton and Darlington line.

A Coloured Engraving, dedicated to the Proprietors of the Birm. and L'pool Railroad by S. and J. Fuller and published 30 March 1825. Size 2½ft. x 1 in oak frame (with glass). *Extremely rare.* £5 5/

Liverpool and Manchester Railway.

THE COLOURED VIEWS (Book.)

- 1831 165e AND now I come to what are unquestionably among the RAREST AND BY FAR THE MOST BEAUTIFUL OF ALL THE EARLY RAILWAY RECORDS viz. the COLOURED VIEWS on

the LIVERPOOL and MANCHESTER LINE. For many years I have been a buyer of railway books but I have never before even seen absolutely perfect copies of these fine works. The first set is entitled "Six Coloured Views on the Liverpool and Manchester Railway with a plate of the Coaches, Machines etc. from drawings on the spot by Mr. T. T. Bury 1831," and the second bears the same title with the omission of the word "Six" and the addition of the words "with descriptive particulars serving as a guide to travellers on the railway" and also dated 1831. There are altogether thirteen different views bound together with eight pages of letterpress (which incidentally describe the better class carriages as being in the shape of coaches and named "Queen Adelaide" "Wellington" etc. each seat therein being numbered.) Every plate is in spotlessly beautiful condition and both sets are published by Ackermann.

Coloured Views on the Liverpool and Manchester Railway. 2 vols bound in 1 (14½ × 12") £10 10/ 1831

Liverpool and Manchester Railway (Book)

831 165f **3T** It is rare to find published descriptions of a railway written by a leading officer of a great Company. But the chronicles of the LIVERPOOL and MANCHESTER have been more luxuriously recorded than those of any Co. Its line has been illustrated by Ackerman's beautiful plates and its history recorded by a prince of the old railway world, a prince whose own doings are historical. In the work below Mr. Booth opens with a tribute to Mr. William James the first projector of the line, speaks of the visit of Messrs. Sanders, Ellis, Kennedy and himself to see George Stephenson's Locomotives at Newcastle, of the formation of the Co. 20 May, 1824; shows us the Co.'s first prospectus 29 Oct. with Chas. Lawrence as Chairman and as Engineer, the attempt to get the Act, the failure, the second prospectus with the Rennies as Engineers, the success of that bill. He then gives us an account of the formation of the line, of the re-election of George Stephenson instead of the Rennies, the stipulations and particulars of the famous Locomotive Contest, etc. 104pp. and illustrations of the line and of the Rocket and Novelty. A very fine old record.

Booth, Henry. Account of the Liverpool and Manchester Railway. d8° 2nd ed. 42/ 1831

Liverpool and Manchester Railway.

Col. Engraving (Unframed Aquatint.)

833 165g **THE** little view below shews "*The Traveller*," "*Times*," "*Marquis of Stafford*" and "*Treasurer*" carriages followed by the *Royal Mail* (the latter apparently a passenger carriage having no side windows and coloured red). A footman sits in front of first carriage facing the engine, the luggage is atop the carriages, the mail has only one box atop and behind it sits the redcoated (?) postman while lastly comes a private carriage in a truck with its occupants and the whole "first class train" is drawn by the "*JUPITER*" locomotive with ordinary tender. The second class train has open carriages some with doors crowded with passengers those without doors not so crowded. All have a slight covering on top and the tender of the *NORTH STAR* Locomotive has its big water barrel in the more ancient style.

Glazed Coloured Engraving of a First, and also of a Second Class, Train travelling on the Liverpool and Manchester Ry. 26" × 10" £2 2/ Ackermann 1833

London and Greenwich (Pamphlet).

- 1836** 165h **ALL** publications relating to the LONDON & GREENWICH RAILWAY (the first of the Metropolitan lines) are excessively scarce. The following small popular description speaks of the thousand archways, of the Act obtained in 1833, of Landmann the Engineer, of the then terminus at Deptford. It has a frontispiece shewing the railway.
London and Greenwich Railway Guide. 8pp. and frontispiece, post 8° *wrappers*. EXTREMELY RARE. £2 2/
 Mansell, 1836

LONDON AND GREENWICH.

- 1838** 165i **THE** engraving above represents the CURIOUS COPPER TICKET used on the GREENWICH LINE (opened 1838)
Greenwich Ticket. 21/

VARIOUS PHOTOGRAPHS, Etc.

- 165j **A** LARGE photograph of ROBT. STEPHENSON, a view of the FRIEND'S MEETING HOUSE at DARLINGTON 1838, and an engraving of JOHN DIXON'S "RESIDENCE" at Cockfield (Durham), making an interesting group.
The Three (each about 15" x 12") 21/

BELGIAN RAILWAYS (Book.)

- 1843** 165k **I** HAVE referred elsewhere to Mr. Dobson's "Historical, Statistical and Scientific Account of the Railways of Belgium from 1834 to 1842" [see No. .]. It is here in its separate form.

Dobson, Edw. Railways of Belgium. d8° 10/6 1843

North Midland Railway (Views.)

- 165l **THE** New St. Bridge, Belper and the entrance to the Mulford Tunnel with signalman and early engine are represented by zincograph process below.
Two Zincograph Views on North Midland Railway.
 22" x 15" 10/

Chester and Holyhead Railway (Book.)

- 1844** 165m **THE** details of BRIDGES and other works as constructed under Messrs. GEO. and ROBERT STEPHENSON make up the album of 32 plates below.

Chester and Holyhead Railway. Details of Bridges etc. Oblong folio. 25/ 1844

Photographs of Viaducts.

165a **BELOW** are some large mounted photographs (16×18) showing the Deepdale and Hownesgill (Stockton and Darlington) Viaducts in course of completion and completed. **Eight Photographs of Viaducts.** 42/

History of Companies.

London and Birmingham Railway.



1837 166 **ABOVE** is a little oval shaped ivory "TICKET." It must have been issued when only the TRING portion of the line was opened and was doubtless a proud possession of one of the first men to go to London by a free railway pass. **London and Birmingham Directors. Small Oval Ivory Pass.** £3 3/ 1837

London and Birmingham and Parkin's System.

1840 167 **A** LETTER to Mr. GLYN in which Mr. CREED is referred to as "this jocose functionary" and as "your Hudibrastic Secretary," in which Mr. BURY is abused, an Engine driver gets apoplexy, and a G.W.R. driver fell asleep, **URGES THE ADOPTION OF PARKIN'S WOOD WHEELS and FAMOUS WOODEN RAILWAY** (the former having been tried on the "THUNDERER" (L. & M. Ry.) and supports Barlow and Brunel's opposition to rails on isolated blocks, and the avoidance of bank engines.

Parkin's Letter to Glyn. 16pp. p8° 10/6 1840

TAFF VALE.

840 168 **TAFF VALE** was the first Welsh line to get into "Bradshaw" and it had some politics in 1840. Now the T.F. wanted to work in connection with some ELY Docks but the "wicked Marquis" (of Bute) had others at CARDIFF which they must use or have his parliamentary opposition. They talked it over when they met and made the meeting historic BY DINING IN THE MIDDLE OF IT. Captain Smith on the side of the Marquis here speaks up for the Bute Docks. Some of STEPHENSON'S Estimates too are here much preferred to BRUNEL'S. It is, I believe, the line (modernized) ON WHICH TREVITHICK RAN THE FIRST LOCOMOTIVE. **Smith, Capt.) On the Port of Cardiff and the Report of Taff Vale Railway Directors.** Illustd. d8° cl. 10/6 1840

Maryport and Carlisle.**A Contractor's Payment Refused.**

- 1841** 169 **IT** was a poor railway in old days that could not run into a law case about something. The **MARYPORT & CARLISLE** started their career BY REFUSING TO PAY a CONTRACTOR FOR HIS WORK. **GEORGE STEPHENSON** gave evidence for the Contractor, and the claim here detailed ended with obtaining £3744 from the Company.
Irving v. Maryport Railway. 76pp. 8° sewn. 10/6 [1841]

THE SOUTH-EASTERN.

- 1845** 170 **THE SO. EASTERN** had 4½ millions invested and found TO 1½ millions more required to live and do well. The **NORTH** **1854** **KENT** was its *bête noire*. It was their particular abomination. And as branches (or "suckers" as they were called) gradually increased many a battle royal waxed and waned over them. The following papers deal with the Board of Trade and the Kentish Railway Schemes (1845); So. Eastern Directors Statement of Position and Projects 1845-6; A Reply to that Statement (1846); Mr. Austin's Select Committee Speech on the Kent lines (1846); the So. Eastern's explanation to Commissioners on the accusations of the Brighton Co.; the So. Eastern Parl. statement promoting five lines and opposing two (1846); Ditto 1847 promoting five and opposing one; and the pamphlet of Lancastriensis on "The South Eastern Crisis" (1854). With all its troubles however its Dividends never seem to have actually failed though it was said some were paid out of capital.
So. Eastern Railway. Eight historical pamphlets. 1845-54
 £2 2/

Newcastle and Berwick.

- 1845** 171 **THE** line proposed in the plan below was to run from the Jarrow Slake (North Shields) and keeping a mile or more from the coast to join the Berwick line three miles east of **MORPETH**. It must have been one of the first projects of the short lived **NEWCASTLE and BERWICK Co.** who made the **THIRD PORTION** of the **ENGLISH EAST COAST ROUTE**. **Newcastle and Berwick Railway, East Coast Line.** Blyth, Seaton Sluice, and other branches. Coloured plan (abt. 3 ft. x 2) 12/6 Circa 1845

Newcastle and Darlington Railway.

- 1845** 172 **THE** little memento of the N. & D. below consists of 78 rules for the Co.'s servants "to be read over every month" and many signatures.
General Rules [for] Enginemen. Guards
Switchmen, Policemen, Platelayers : . . . on the Newc
and Darl. Ry. and at end about 72 signatures probably c
the old employees. 18pp. printed, and M.S. pp. 10/6 184

London and So. Western Railway.

- 1846-50** 173 **SO. WESTERN OFFICIAL PAPERS** (1846-50) refer to the following important matters: 1846, Laying a **NARROW GAUGE** from **LONDON to LANDS END**, and the **PORTSMOUTH ATMOSPHERIC Ry.**; 1847 **FAILURE** to get west of Exeter 1848 Opening of **Waterloo Station and DEVONSHIRE and WINDSOR district EXTENSIONS—SALISBURY and YEOVIL** extension, **PROXY VOTES** given, proposed **AMALGAMA**

Description of Companies—continued.

TION of So. Western, North Western and Great Western Lines, 1849 Directors accused of DISHONESTY, 1850 Mr. GOOCH retires to another Company. *INCOME* of principal officers to *vary with Co.'s Revenue*.

London and So. Western. Thirteen Official Papers referring to above matters. 30/

London and North Western Incorporation.

1846 174 **BELOW** IS THE ORIGINAL act for the INCORPORATION of the LONDON and NORTH WESTERN RAILWAY. (Curiously Mr. GLYN at the first meeting of the Joint Co. expressed a doubt whether they would pay the high dividends of the components). It was THE MOST IMPORTANT RAILWAY AMALGAMATION THAT HAD TAKEN PLACE.

London and North Western Original Act of Amalgamation. 42/ 1846

G.W.R. tries to secure the So. West. Route to Exeter.

1846 175 **THERE** WAS APPARENTLY no knowing what even the larger companies might do at any minute in that year of mania 1845. The GREAT WESTERN had an agreement of Peace with the So. Western but still the latter woke up one morning to hear of the INTENTION of THE G.W.R. TO MAKE a NEW LINE TO EXETER (!) Thereupon the So. Western began to secure for themselves what they considered should be their route. And the following Letter results.

Letter to So. Western Shareholders on Differences with Great Western. 8° 15/ 1846

G.W.R. Cost of the Broad Gauge.

1846 176 "**L. S. D.**" in tackling the Broad Gauge and the G.W.R. remarked that in no other Co. was there more of the *political element* and so little of the *mercantile*, stated that **SHARES £230 IN AUG.** were now (in DEC.) £145, that the G.W.R. cost £57,800 per mile and the GRAND JUNCTION £27,700 that the G.W.R. OWES more by £3700 per mile than the G.J. cost, and that since the "**Battle of the Gauges**" the G.W.R. LIABILITIES AMOUNT to £20,000,000 (!) **The Broad Gauge. The Bane of the Great Western Co.** By L.S.D. 57pp. 8° 15/ 1846

G.W.R.

1846 177 **SEE** also under Broad Gauge.

South Western Ry. Exeter Main Line.

1847 178 **BELOW** is the famous speech of Mr. Cockburn on the SALISBURY and YEOVIL, EXETER YEOVIL and DORCHESTER and two other lines in which speech he lays before the Committee of the HOUSE of COMMONS the CLAIMS of the SOUTH WESTERN TO MAKE A LINE TO EXETER, and asserts that the *Great Western* would not make the line if they got the power. The speech is printed in large type and among the

Description of Companies—continued.

TAME many items of interest it records (p. 105) the "signal and disastrous failure" of the **ATMOSPHERIC PRINCIPLE** up to date.

Speech of Mr. Cockburn for the L. & S. W. line to Exeter etc. 175pp. *large type*, d8° 21/ 1847

Reports on Companies' Bills.

1847 179 **How** come the Reports of the Commissioners of Railways referring to the Bills of very numerous lines dated March April and May 1847. They give many important links in the history of the Companies.

Reports of Commissioners of Railways relating to Gt. Northern, So. Eastern, Ipswich, So. Western, Eastern Counties, Glasgow and Carlisle, Ayr, etc. folio. 25/ 1847

G.W.R. The Famous Robberies.

1847 180 **IN** 1846 there were a series of **GIGANTIC ROBBERIES** of luggage from the G.W.R. stations. The Co.'s servants were suspected and Mr. NASH, Manager to the Co.'s Solicitors, urged by the Co., went to great expense and trouble to get to the bottom of the matter, finally securing the conviction of some chief offenders, while the Co. discharged one of its principal clerks for not giving evidence. Mr. Nash however incurred an action for trespass and also lost his 'berth' over it and the G.W.R. arranged then to "back out" of the affair and left him in a mess. The following pages give an account of this very mysterious affair, together with some extraordinary revelations and confessions as to the robberies.

Railway Robberies. The Chief Justice's Summing up in *Wareham v. Prance, Nash, and Collard*, together with the Confessions of the Depredators and a special pamphlet published by the *Railway Record*. 104 x 21pp. 8° and 18° 7/6 1847

The Great Northern Railway.

1847 181 **AS** the railway system itself rose with the first Mania so the last great English Railway rose with the last great Mania. So too the opposition to the **GREAT NORTHERN** was equalled only by the early opposition to the railway system itself. Week by week and year by year the *Railway Times* (the leading railway journal of the time) disputed every statement and exaggerated every drawback of the "London and York bubble." Its pages for 1844 '45 and '46 show opposition that would almost stagger belief. Opposition however arose from all quarters till the great Company found itself saddled to start with with £452,620 for preliminary expenses (!) "But," said its chairman, Mr. Denison, "there never was such a contest fought in Parliament before!" *Auxiliary* however had by no means ended there and the reports below give a vivid picture of this romantic Company rising amidst all the excitement and suspicions of the Mania period and through the days of the great Hudson crisis guided by the noble Denison that marvellous chairman who combining so well the *sauveteur in modo* with the *fortiter in re* through bitter opposition without and matchless roguery within brought it at last to a sound financial footing and enabled men to fly by the fastest trains in the world along the magnificent trunk line which had at last become the nearest between the metropolis of England and that of Scotland.

Great Northern Railway Reports and Proceedings from August 1847 to 1853. £2 2/

Midland Railway.**Specifications. Nott. and Mansfield. 1847**

1847 182 COPY of the MIDLAND RAILWAY CO.'S SPECIFICATION work to be executed on the NOTTINGHAM and MANSFIELD RAILWAY (called the *Nottingham Contract*). A foolscap folio MS. book covered in red leather bearing above the name JOHN UNDERWOOD the date AUGUST 1847. The line was to run from Rings Meadows near Nottingham to a point in the parish of Butwell 4 miles, 19 chains, from the starting point.

Nottingham and Mansfield Specification. 21/

Eastern Counties Railway. Rating.

1848 183 IN Mr. COOKE'S Letter to Mr. WADDINGTON he refers to rating being estimated on the cost of the moveable stock, to his assessment of the COLCHESTER line at £653 per mile, to railway renting, stock depreciation etc.

Cooke, Layton. *Observations on Renting and Rating Railways.* 15pp. 8^{vo} 7/6. 1848

York Newcastle and Berwick Railway and The Hudson Crisis.

1849 184 BETWEEN 1836 and the terrible days of the Hudson Crisis the "*Great North of England Railway Co.*" had been able to make their line only from YORK to DARLINGTON two other Companies (to *Newcastle and thence to Berwick*) had completed the connection to SCOTLAND. The three had then been amalgamated into the "*YORK NEWCASTLE and BERWICK*" and had become owners of a SUNDERLAND DOCK. The official reports and other papers below commencing in 1847 indicate grumbling about the shares of the old Companies. "*I might have made a fortune out of them but I did not make a sixpence*" replied Mr. HUDSON. At various meetings he held out hopes of greatly increased traffic by the completion of the Tyne and Tweed bridges and the purchase of the line from Newcastle to Carlisle and Maryport. By March 1849 however the first COMMITTEE of INVESTIGATION had been appointed and as the days wore on £7,185 was said to have been overcharged on one account, and over £100,000 on another till in October came the final assertion that the Company's Accounts had been falsified to the extent of—£121,924 10 3 (!) Red ruin spread, the "Railway King" fell and all men were certain that George Hudson was the biggest rogue who had ever tried "to make things pleasant." **York, Newcastle and Berwick Railway.** Official Reports showing the apparently SATISFACTORY POSITION of the Company, the breaking out of Committees of INVESTIGATION, YORK NEWSPAPER REPORTS, the actual charge of FALSIFICATION against Mr. HUDSON, and the CAREER of the Co. AFTER the DEPOSITION OF THE "KING." *Altogether about two dozen papers as received by a shareholder at that critical time.* £3 3/

York and North Midland.**THE GREAT HUDSON CRISIS.**

1849 185 THE YORK and NORTH MIDLAND running from

Description of Companies—continued.

Normanton to York was said to be GEORGE HUDSON'S "pet line." Among the papers below THE FIRST REPORT OF ITS COMMITTEE OF INVESTIGATION in July '49 claimed £3,196 WRONG with the HULL and SELBY SHARES and that at least £70,000 had been HUNG ON TO CAPITAL to "make things more pleasant" as the Press put it. THE SECOND REPORT in September showed 12,000 shares disposed of by Mr. Hudson, "when and how he pleased," "no books," "directors dummies—satisfied with liberal allotments and good premiums"; "£90,000 belonging to the Co. twelve months in Mr. Hudson's hands without Directors knowledge"; "£9000 overcharged for Rails" and so on. [In the middle of September *Herapath's Journal* reported "£593,694 as representing A FEW OF THE CHAIRMAN'S CHEESE PARINGS AND CANDLE ENDS" FROM THE TWO YORK COMPANIES]. And the THIRD REPORT said that the Manchester and Leeds Co. had agreed to get out of any loss on the Hull and Selby lease so that the Y. and N. M. R. would suffer a loss of £17,000 per year by themselves and that Mr. Hudson had landed the Co. into a million pounds of expenditure: or as the Press had it £35,000 to support his Telegraph Co., £560,000 to improve his Market Weighton Estate and £468,000 to buy the Whitby and Pickering line to become M. P. for Whitby.

York and North Midland. A dozen Official Reports showing the Co. at peace under Mr. Hudson, the rising storm, the famous reports of the COMMITTEE of INVESTIGATION into the Company's affairs, the angry dispute about the new Chairman (Mr. Meek, Lord Mayor of York) and the progress after the storm under Mr. H. S. THOMPSON. (21 Feb. '48 to 28 Aug. '50). £3 3/

London & Nor. West. Ry.**ACTION BY CROUCH, THE CARRIER.**

1849 186 **JN** 1849 an action was brought by one CROUCH, a Carrier, against the L. and N. W. Ry. for parcels lost and an overcharge (6/8 for 1/10). IT WAS ALLEGED THAT THE Co. claimed immunity from breaking open, detention, and capricious charges and TRIED PURPOSELY TO RUIN CARRIERS. 8 pp. 8° sewn, 1/ 1849

Great Southern and Western Railway.

1849 187 "THE SECOND CITY OF IRELAND" (Cork) was joined to DUBLIN in October, 1849, by the slow going GREAT SOUTHERN and WESTERN, and below is a LIST of the SHAREHOLDERS, their residences, the number of their shares, etc., a few months before that date.

Gt. Southern and Western Ry. List of Proprietors
30 June, 1849. 30/

The G.W.R. and So. Wales Railway.

1849 188 **JN** REFERENCE to the connection of the GREAT WESTERN with its MOST IMPORTANT EXTENSION LINE (the SO. WALES RAILWAY) I have an Appendix (practically complete in itself) TO A "STATEMENT" explaining the relations of the Co.'s in extracts taking from the meetings of both. [The "STATEMENT" ITSELF a little incomplete will be included *gratis* if desired].

Appendix to Statement relating to Great Western
[Guarantee] to So. Wales Railway. 63 pp. 8° wrappers, 10/6 1849

London and Brighton South Coast.

1849 189 **IN** the following pages Mr. Laing mentions that the Brighton Co. had 112 Locomotives and 3 on order and that cost of Locomotive Power will be in future about £52,500 per annum.

Laing, S. Report on Depreciation and on a Reserve Fund. 16 pp. 8° 7/6 1849

A G.W.R. CREDITOR.

1850 190 **TIMOTHY TYRRELL** once honoured a G.W.R. Meeting by his presence almost in the CAPACITY OF A BAILIFF. At any rate the G.W.R. owed him a little bill and he came to put down extravagance. In the following pages he tells the Directors they are only authorised to have £2,720,000 Debentures but that they owe £5,536,959.

Tyrell's Letter to Great Western Directors, 8° hf. cf. 10/6 1850

WEST LONDON RAILWAY.

1850 191 **IN** the work below I find a very interesting account of the history of that curious work formerly known as the BRISTOL BIRMINGHAM and THAMES Junction and afterwards WEST LONDON, "The smallest railway" (only 3 miles long) is here spoken of as closed and as "the silent railway." On it Messrs. Clegg and Samuda tried the Atmospheric System. The Cyclopædia devotes twenty-two pages to the Metropolitan Railway Stations of that day.

Knight's Cyclopædia of London, 860 pp. 5/ 1850

Midland Railway.**The Company's Regulations for its Servants.**

1855 192 **BELOW** is a little booklet in folding parchment covers containing the 155 rules issued for the guidance of the Midland Co.'s servants, Jan. 1855, signed by John Ellis (chairman), Jos. Sanders (sec.) The rules suggest a good many ways of getting killed.

Rules and Regulations for Officers and Men of the Midland Ry. 94pp. 16° 7/6 1855

"The Great North-British Line" and Its Poet.

1855 193 **PROBABLY** the N.B.R. was the first Scotch—or even British—Railway that gave rise to a poetry book. But anyway in 1855, The LEISURE HOURS of a RAILWAY LABOURER were dedicated...to...the "North-British Translation Association." producing 95pp, some in "blank verse" about "a certain man of the guards who was a Gideonite, &c," and about another who had to sit on van tops and sang—

"Perched on the top, all I could do
Was just to guard myself."

And once it is said there was a Mutiny of the North-British Heavy Dragoons (the General Manager's Own), for the G.M. thought—

"Stern retrenchment I'll combine,
With wages screwing skill,
And rule the Great North-British line
By my own sov'reign will."

The Leisure Hours of a Railway Labourer. 18° 10/
Edin. 1855

Great Northern Ry. Nominal Fares.

- 1856** 194 **J**N 1856 the Great Northern published some Correspondence relating to the combined opposition of the NORTH WESTERN, the MIDLAND, and the MANCHESTER, SHEFFIELD, and LINCOLNSHIRE lines against the GREAT NORTHERN (partly on account of the desire of the G.N.R. to communicate with Manchester), the opposition resulting in immense reduction of fares e.g. London to Doncaster, 3/ (present fare 13/). With reference to the Gladstone Award and the Ten Towns Agreement.

Minutes and Correspondence between the Companies
[named above]. 47pp. 8° 7/6 1856

Great Southern and Western.

- 1857** 195 **A** letter circulated among the G.S. and W.R. proprietors led to the printing and publication of SPEECHES by Messrs. BURKE and SCOTT on Athlone and Tullamore Extension and Athlone Junction with Midland.
Speeches on Great Southern and Western Extension. p8° 7/6 1857

The G.W.R., Mr. Gooch, and the Ruabon Colliery

- 1857** 196 **M**R. GOOCH the G.W.R. Loco Supr. was evidently interested in Coal. He was with the G.W.R. from 1838 and here in 1857 he states that if necessary HE WILL LEAVE HIS OLD COMPANY TO UNDERTAKE THE MANAGEMENT OF the RUABON COLLIERY COMPANY (p 25).
Bayley, Robt. On the G.W.R. and Ruabon Coal Co. 8° 10/6. 1857

L. & N. W. R. Share Transfer Scandal.

- 1860** 197 **A** VERY curious affair with regard to the transfer of some shares happened in 1860, in the case HARE v. L. & N. W. R. in which the Vice Chancellor qualified the proceedings of the Co. as "MOST DISCREDITABLE" and the *Times* hinted that the SECY. Mr STEWART had really COMMITTED PERJURY. The following pages give an extract on the case from *The Times* and some curious references to various Railway Companies.
Railway Management illustrated in the Judgment
Hare v. L. & N. W. R. 10pp. 8° 7/6 Circa 1860

London Brighton and So. Coast Crisis.

- 1867** 198 **W**HEN a line returns no dividend for three half years one cannot wonder at bad feeling. Mr. Schuster's bold policy ended in a COMMITTEE OF INVESTIGATION, and here are the COMMITTEE'S REPORT, Mr. SCHUSTER'S SPEECH, DIRECTORS' STATEMENT and other Papers referring to a very lively time.
Lond. Brighton and So. Coast Financial Investigation
Papers (7) 21/ 1867

MIDLAND RAILWAY.

- 1875** 199 **M**R. Williams amid his history of the "MIDLAND" traces the separate histories of the "MIDLAND COUNTIES," "NORTH MIDLAND," "Birmingham and Derby," "Birmingham and

Bristol," "Leicester and Swannington," and the complete history, well illustrated, has made, as *The Saturday Review* remarked "A VERY INTERESTING AND LIVELY PICTURE OF RAILWAY ENTERPRISE" and, as the *Derby Mercury* said, *the Company could not have fallen into better hands.*"

Williams, F. S. *The Midland Railway.* 700pp. roy 8° cl. 8/ [1875]

STOCKTON AND DARLINGTON.

1875 200 **MR. JEANS** gives some most important information and "sticks up well" for the **FIRST PASSENGER RAILWAY** in the pages below. John Dixon's career is detailed, and Hedley is credited.

Jeans, J. S., *Jubilee Memorial of Ry. System and Hist. of Stock. and Darl. Ry.* d8° 10/6 1875

THE GREAT EASTERN.

1876 201 **ABOUT** forty years after Mr. Herapath's trenchant criticisms of the Eastern Counties policy, the **WHITE ELEPHANT** (now adorned with the title of the **GREAT EASTERN**) came under the tender mercies of Mr. M. T. BASS, M.P. It was still the same old tale, every other line was paying, but the Great W.E. had done nothing respectable for ten years. Here are the attacks, the reply, and the concurrent reports of the Company.

Great Eastern Railway Pamphlets and Papers, bound together. 6/6 1876

Potteries Railways. Curious Items.

1836 202 **LATE** as the Potteries were before they got a railway two well-known Companies were projected, the "Manchester, Cheshire, and Staffordshire," and the old "South Union," (the latter within a week of the other), as early as 1836 to run from Manchester to the South. (*Vide* "GENERAL OBSERVATIONS" pub. by Longman, 1838). After many curious incidents, amid which the Companies amalgamated into the "MANCHESTER and BIRMINGHAM Ry. Co.," a line was made to CREWE only (to the disgust of the Potteries), and a subsequently proposed extension fell through about 1842. In 1845 a new scheme "The South Union, or Manchester, Potteries and London" started. And papers belonging to the "M. and Cheshire" have now turned up with those of the later scheme as if there had been a connecting link. A lawyer's bill dating from November 31st 1836 from J. P. HARDING against WHEELER and MARRIOTT gives details of early proceedings of the old "Manchester and Cheshire" scheme. Some Mr. Wheeler was afterwards Secy. of "Manchester and Birm. Ry." and there are several HARDINGS connected with this later "South Union." Besides the "bill" there are "lists of Assents and Dissents" to the old line. Among the papers of the S. U. are "Assents" etc., draft notices of applications to parliament, Map, Prospectus, and a Subscription Contract giving list of Subscribers names in which MESSRS. BACKHOUSE, CARDEN, and WHITEHEAD are shown to have each paid £1000 as deposit and WILLIAM MAKEPEACE THACKERAY of 88 St. James' St., London HAD HERE HIS NAME DOWN FOR £400 in SHARES and had PAID £40 DEPOSIT. MR. ANDREW SPOTTISWOODE was also a large subscriber, and CHARLES DICKENS. (?)

Manchester, Cheshire, and Staffordshire promotion papers including Harding's bill, and the later "South Union" promotion papers including the interesting "SUBSCRIPTION CONTRACT." £5 5/ 1836-45
Also Prospectus and Map of the last mentioned "South Union" with long list of Directors. 10/ 1845

The Guides.

WHAT IS A "GUIDE"? In railway literature either a TIME TABLE, a DESCRIPTION of a RAILWAY, or a DESCRIPTION of the DISTRICT through which a Railway passes, and generally with a historical account of the Line. THE LATTER, chiefly, are MY "GUIDES." As historical railway literature they are of immense interest. Whether by words alone, or with the help of woodcuts and plates, they give us their picture of the district when the railway first appears in it. At this spot one reads for the last time of the great Village Inn which is now to become deserted, the coach road having just lost its brightest and best attractions, and the little village itself, now out of the main current of life, about to decay. At other

spots a railway town about to rise, or a town developed with improved means of transport. On or by the line itself the works of the early engineers, Stephenson, Locke, Cubitt, and others, and the homes of the magnates, richer if not prouder, who have eased or marred the line's success. Every page of the "Guide," too, bearing the name, not of the district, but of the railway over which the early authors expected one would travel, with wire spectacles on nose and "Guide" in hand, in an open railway jaunting car at twenty miles an hour. There are many varieties of the Guide, each telling an historical, topographical, and financial tale of the line side to the modern observing eye.

LIVERPOOL AND MANCHESTER.

1833 1001 THE older records connected with England's most famous railway are growing steadily scarcer. **The Railway Companion** by "A Tourist" is one of these, with its lithographic illustrations of Irwell Bridge, Water Street Station, Park-side, Newton, the locomotive, "CALEDONIAN" (apparently having vertical cylinders working cranks within the frames), &c., and forty-six pages descriptive of an excursion on the Liverpool line, while the curious arrangement is referred to of the police and passenger stations erected every mile along the line.

Railway Companion, describing an excursion along the Liverpool [and Manchester] line. By a Tourist. 5 plates, d. 8° *wrappers* £2 2s 1833

LEEDS, HULL, AND SELBY.

1835.

1002 ONE of the earliest railways is the LEEDS, SELBY, and HULL—a railway that expected ruin from Mr. HUDSON's *York and North Midland* (*vide Observers on Principal Rys.* 1838, p. 16), but as a fact was never successful till after that line was opened (*vide* Wishaw, 1840). The line is of considerable interest as being the first running from the town, which produced one of the first railway locomotives (BLENKINSOPP'S in 1811). The little work below contains a quaint account of the

opening of the line by the locomotive **Nelson**, 22nd Sept., 1834, from which we note that the train was *delayed* at starting by the trifling fact that THE AXLES OF THE ENGINE WERE TOO LARGE! The Company's *Fares and Time Tables* are included.

Parson's (Ed.) **Tourist's Companion**, or History of the Scenes and Places on the route by the Railroad and Steam Packet from Leeds and Selby to Hull. With Time Tables. 243pp. 12° 35/

Pub. London, Manchester & Selby, 1835

WHITBY AND PICKERING.

1836 1003 IN THE MAP OF ENGLAND attached to the famous little Bradshaw of Oct. 25th, 1839, there appears all by itself in the North-east of Yorkshire a red line to show the WHITBY and PICKERING RAILWAY. We have a choice Memento of this old line of **George Stephenson's** (brought into prominence later on by GEO. HUDSON) in the work below, with its soft and beautiful plates of a most picturesque country, amidst which we meet the curious little railway and its carriages, drawn then by horse power.

Belcher (H.) **The Scenery of the Whitby and Pickering Railway.**

LARGE PAPER COPY. 115pp. roy. 8° cloth. 25/

1836

1004 Ditto. SMALL PAPER COPY. d. 8° cl. 21/

1836

NEWCASTLE AND CARLISLE.

1836 1005 **ONE OF THE FIRST PASSENGER RAILWAYS** was to be opened half-way from **CARLISLE** towards **NEWCASTLE**, and, a week before, a scribe went out to obtain information prior to what was to be "the most important day that ever dawned upon merry Carlisle," and the line was to bring to it "a prolific source of commerce and wealth." On arrival at Greenhead he saw Stephenson's "**Atlas**," "a perfect beauty," which "had a steam whistle" for four signals, all of which "in time the inhabitants would understand." The "**Atlas**" made "a great noise in working, like a sob"! Inhabitants amazed, horses terrified. The "**Heracles**," "**Sampson**," "**Atlas**" and "**Gileland**," all to leave Carlisle on Monday!

Brooke (Hy.) Sketch of Railroad from Carlisle to Greenhead.
12° 21/ 1836

1837

1006 SCOTT tells us that though this line ran past the cottage in which George Stephenson was born, its first act did not permit locomotives. They were used, however, by 1835. Appended are the Stations and Fares. **Scott's Railway Companion**, with map. 105pp. 18° 15/ 1837

1838 1007 A curious little booklet below gives an account of the Grand Opening of the line throughout (i.e., to Redheugh Station on South-side of Tyne opposite Newcastle), describing the carriages and mentioning the locomotives "**Wellington**" and "**Nelson**" (of Hawthorn's), the "**Victoria**" by Hawks and Thompson of Gateshead, and incidentally the "**Eden**" (Stephenson's). **[Mitchell's] Guide to Newcastle and Carlisle, and Account of Opening.** 32pp. 48° *wrappers*, very rare. 21/ 1838

THE GRAND JUNCTION.

From the "**LIVERPOOL AND MANCHESTER Railway**" to **BIRMINGHAM**.

1837 1008 **THE GRAND JUNCTION, THE FIRST BIG ENGLISH RAILWAY**, was opened July, 1837. And **Cornish** at Birmingham at once produced his **COMPANION**, the first edition of which was exhausted in 14 days, so eager was the demand for it, the Editor afterwards walking along the whole line to secure the correctness of his 2nd edition. It gives the time tables, explanations as to first and mixed trains, the regulations, the fares and distances from each station, the height of each above low water mark probably to show what kind of gradient had been come up (the figures showing 150 feet at Edge Hill and rising up to 371 feet at Birmingham), curious old advertisements of date, etc., etc.

• **Cornish's Grand Junction and Liv. and Manchester Railway Companion**, 18° with view of train, map and section, 20/ 1837

1837.

1009 FREELING HURRIEDLY PUSHED ON HIS **COMPANION** on hearing of that of **Cornish**. He prided himself on the **SPECIAL ACCURACY** of his **DESCRIPTIONS**. The work notes that this great line was opened without ceremony to respect the memory of **Mr. HUSKISSON**, it gives a brief history of the line, the regulations, the time and fare tables, the objects of interest on the line, and their distances, and many fine old advertisements, while its map was produced UNDER THE CARE of **MR. LOCKE, THE COMPY'S ENGINEER**. **Freeling, A. Grand Junction Railway Companion.** 18° cl. 10/6 1837

GRAND JUNCTION—continued.

1838 1010 **OSBORNE** INCLUDED A HISTORY OF RAILWAYS, carefully describes and illustrates the different kinds of RAILS, the CARRIAGE CONNECTING LINKS, a curious SIGNAL APPARATUS, a "MESSENGER," two sorts of "BREAKS," mentions Mr. PALMER, the LIVERPOOL CONTEST, and describes and illustrates a LOCOMOTIVE ("Swiftsure" type), gives a NEAT CHRONOLOGICAL HISTORY of the LIVERPOOL and MANCHESTER and of the GRAND JUNCTION Lines, with receipts, expenses and PROFIT of the former from Dec., 1831, to June, 1837, and the report of the 5th Annual Meeting (Sept., 1837). *Time Tables, old advertisements, a map of the line, a geological map, view of Chat Moss, views of Old Stations, Streets, and Towns at date, together with details as to places en route, etc., etc.,* make up a very attractive little work. **Osborne's Guide to the Grand Junction Railway.** 12° cloth, 2nd edn. 10/6 1838

1011 **DRAKE'S GUIDE** GAVE STEEL PLATE VIEWS of the Scenes on the Line, including a view of the FIRST OLD PASSENGER RAILWAY STATION EVER USED FOR BIRMINGHAM (Vauxhall), two views of ASTON HALL (the grand old mansion from which the worthy son of JAMES WATT would see the early Locomotives of GEORGE STEPHENSON), a

coloured map of the line; a fare and distance sheet with times, and regulations, a view of the "Northumbrian" WITH ITS FIRST and SECOND CARRIAGES TRUCKS, etc., and the usual Guide to the Towns en route, old advertisements etc.

Drake's Road Book of the Grand Junction Railway, p.8° 2nd ed. 10/6 1838



KILSBY TUNNEL.

ESTIMATE .. £99,000
COST .. £500,000

THE LONDON AND BIRMINGHAM.

BIG RAILWAYS had commenced. The first had joined the North to BIRMINGHAM. That was easy work. And the second was in hand. Only another hundred easy miles, and the great ironway might have reached the METROPOLIS amidst almost uninterrupted goodwill. I got there, for the STEPHENSONS could get anywhere, but fate worked hard to kill it. For Contractors it rained almost uninterrupted ruin, and a million extra sovereigns had to sink to gain its share holders no extra dividend. "YOUR STEPHENSONS ASKED FOR TIME MORE THAN RENNIE," cried Herapath. "AND THEY WILL NOT HAVE ENOUGH NOW. Leave your Tunnels: they will do for GIPSY (CAME OF FELONS' CELLS, and let Rennie make his own road. ABANDON THIS while enough for Rennie is still in hand." But, without Rennie's unadulterated genius came to the rescue. Robert Stephenson, the doubted engineer, won the victory, as will be seen in the work below, and the monuments of his further victories reach from the St. LAWRENCE to the NILE.

1839 1011A **THE LONDON & BIRMINGHAM** says MR. JEAFFRESON, the biographer of ROBT. STEPHENSON, was the FIRST of the GREAT METROPOLITAN RAILROADS. Its locomotives at any rate were the first railway one seen in London and its works are memorable examples of engineering capacity, BRUNEL and others took them as a guide AND THEY BECAME RECOGNISED MODELS FOR RAILWAY PRACTICE.

The railway is well illustrated by a series of fine large plates in the work by **Bourne**, with full details by Britton as described on p. 12 of my last Bibliography.

BOURNE'S elaborate volume is the FINEST DEVOTED entirely TO THE LINE, and gives a good account of those famous works which include the "nine tunnels" HERAPATH suggested could so well be "converted into dark holes for the punishment of criminals or into very excellent gipsy retreats, cowsheds, pigsties, etc., etc."!!

Bourne London & Birmingham Railway, folio, cloth, £3 3s 1838

London and Birmingham—continued—

1838 **1011B** **WYLD** published his guide the year of the opening. It is No. 114 of the former Bibliography, but it may be of interest to add here the observation on p. 10 that after passing under the London and Harrow road the line is continued "by the STATION of the BIRMINGHAM, BRISTOL, & THAMES JUNCTION RAILWAY" ["*The Silent Railway*"] "and under another bridge till we arrive at the FIRST WATERING STATION, at which the train is stopped to replenish the cistern of the locomotive!"

Wyld's London & Birmingham Railroad Guide. With map. 18°
cl. 10/6 1838

1838

1011C **THERE IS A GOOD LITTLE HISTORICAL INTRODUCTION** in **Freeling's L. & B. Companion**, it speaks at some length about TELEGRAPHS, which he says were used between Euston and Camden Town in the autumn of 1837. Mr. F. comforts

travellers on tunnels being safe, and has the usual descriptions and many special items.

Freeling's London and Birmingham Railway Companion. Map, etc. 18° cl.
10/6 [1838]

1838 **1011D** **NO DOUBT** the EXPRESSION "RAILROADIANA" was not invented long before 1838 but in that year the title was born on a guide book. Another title of the same book was "A NEW HISTORY OF ENGLAND" and LONDON & BIRMINGHAM RAILWAY was also big on the titlepage. For a frontispiece it had the RICKMANSWORTH CHURCH WINDOW (elaborately coloured), it had some interesting antiquarian lore as to places en route and extracts referring to a COMPANY'S MEETING when KILSBY was building, TURNPIKES in an Engine House, and the famous STURGE advocating NO SUNDAY TRAINS when Coghlan replied that to be consistent, if JEWS got the line there would be NO SATURDAY TRAINS! etc., etc.

Railroadiana. 216pp. 9 illusts. two coloured p.8° cl. 41/ 1838

1839

1012 **THE GUIDE BY Drake** went in for STEEL PLATES from which we get good peeps at the railway and trains along the route. On the coloured map is a view Euston Entrance (after the style of the entrance to a Greek City); on p. 75 KILSBY TUNNEL is compared to the Tunnel of Xerxes through Mount Athos (a

tunnel of the same length which took the whole army three years), and on p. 44 among railways the CENTRAL KENT and the GREAT EASTERN (wherever that was *then*) are mentioned.

Drake's Road Book of the London and Birmingham Railway. With map, steel plates, woodcuts, etc. Post 8°, 10/6 1839

1012a A cheaper edition without plates, 7/6

These works also speak of the comfortless second class carriages. [1840]

339-40 **1013** **THE LONDON and BIRM.** Railway traffic also induced **Cornish** to issue a Guide to the town to tell of the "pious" people and the manufactures. It speaks of the GRAND JUNCT. TEMPORARY STATION at VAUXHALL, of the COMING Station, gives a steel plate of L. and B. Station, speaks of the line from DERBY (via Hampton) and the BIRM. and GLOUC. line commenced.

Cornish's Stranger's Guide to Birmingham. 18° 7/6

1839-40

- 1839** 1014 **LIEUT. PETER LECOUNT** who was connected with this line from its commencement wrote at any rate the historical portion of **Roscoe's**, and explains how **SIR JOHN RENNIE** and the two **STEPHENSONS** had opposition companies with full boards, secretaries, engineers, etc. **ROSCOE'S** has a curious history. Peter Lecount said it might be called "the history of the Cock Lane Ghost" (see under Magazines). Despite his abuse, however, it is one of the best of the railway guides. The authors give a considerable amount of information about the line, and there are capital plates and woodcuts to illustrate it.
- Roscoe's London and Birmingham Railway.** With map and eighteen steel plates, and many woodcuts, d.8° cl. 10/6 [circa 1839]

1840

- 1015 **THE** historical sketch of railways and various other items appeared both in **Osborne's Grand Junct.** and in his **London and Birm. Guide**, but the latter contains the **VALUABLE L. and B. REPORT** with detailed **STATEMENT OF COST OF CONSTRUCTION**, a sketch of No. 34 **FOUR-WHEELER ENGINE** (with the note opposite that "the four" L. and B. Engines were made by **MAUDSLEY, SONS and FIELD**, of London), there are some interesting views and descriptions of railway works, including one outside the **FEARFUL KILSBY TUNNEL**. The guide is up to the usual mark and there are the old advertisements showing who were the old tradesmen of that day.
- Osborne's London and Birmingham Railway Guide.** 30 engravings, 12° cl. 10/6 [1840]

- [1844] 1016 **FOR** numerous neat little views all along the whole length of the line and as a memento of the old eagerness to see the country, the **Travelling Chart** issued by the *Railway Chronicle* is a good little record.
- Railway Chronicle Travelling Chart** (London to Birm.) A long folding sheet, 10/ [circa 1844]

L. & N. W. R.

- 1016a **OF** all the topographical railway guides **SIDNEY'S RIDES ON RAILWAYS** may probably be considered the brightest. From London to Carlisle he takes railways, towns, and people, and has something piquant, or startling, to say all along the line. **CHARMING LITTLE VIEWS** lend additional attraction to this little work.
- Sidney, Samuel. **RIDES ON RAILWAYS.** 254 pp. with steel plates. sq., 12mo. 10s6d [1851]

- 1855-62** 1017 **THOUGH Measom's GUIDES ARE OF LATER DATE** than others they have a valuable redeeming feature. They give us views of the **OLD STATIONS**, with the **OLD TRAINS and LOCOMOTIVES** and fully illustrate the route at their date. Page 59 of the **L. and N. W. R. Guide** shows us our chief Birm. Station now unrecognisable as such and Temple Row with the Royal Hotel where the **DUCHESS OF KENT** "from home was never more at home." The Birmingham hotels have now forgotten what a royal duchess is like, and the old "home" is practically long since swept away. A few years later (1862) a further edition of the book was issued with more elaborate descriptions of the manufactories.
- Measom's Illust. Guide to the Lon. and Nor. Western Railway.** 156 pp. p8° cl. 10/6 [1852]
- Ditto ditto ditto** 536 pp. p8° wraps. 5/ [1862]

G. J. AND L. & B. (Combined Guides.)

1838

1018 **COGHLAN'S IRON ROAD BOOK** is a great favourite and in it one can see an old world air, the tunnels are NOT FOUL, one is to "LOOK OUT" FOR CINDERS, inclines are awkward, railways are not DANGEROUS, there are "CONSTABLES," "RE-

CEIPT TICKETS" Choice of Seats, and it howls at the "tips" extorted by Hotel Waiters and Chambermaids but of course does not neglect the needful guide, maps, time table, statistics, etc. A bright little book. [1838

Coghlan's Iron Road Book. 18° cl 21/

1839 1019 **THE COMBINED GUIDE** by **Cornish** has a special interest for it contains one of the **Earliest General Time Tables** EVER PUBLISHED, giving the LON. & BIRM. and its AYLESBURY branch, the G.J., the NORTH UNION, NEWCASTLE & CARLISLE, MANCHESTER & LEEDS TIME TABLES on or after JUNE 1839, the London and Birm. regulations, guide down the line and the GRAND JUNCTION GUIDE described above.

Cornish's [Combined] London & Birm., Grand Junction, and Liverpool & Manchester Railway Companion. 18° cl. 27/6 1839

1839

1020 **FREELING AND DRAKE** also issued COMBINED GUIDES (described separately above).

Freeling's London Birmingham

and Liverpool Ry. Companion. 18° 20/ [1838]

Drake's Road Book to Grand Junc. and Lond. & Birm. 20/ [1839]

1840 1021 **Home and Country Scenes** includes "*Roscoe's London & Birmingham*" and a description of the "*Grand Junction*." The latter portion is excessively scarce. The FRONTISPICE shows the GRAND AVENUE then separating ASTON HALL (home of JAS. WATT, JR.) from the MAIN LINE NORTH. The fine avenue is now gone, the park covered by the jerry builder, and the Grand Junction (there) turned into a branch line! **Home and Country Scenes.** Guide to Lond. & Birm. and Grand Junction. With fine steel plates. 21/ Circa 1840

GREAT WESTERN.

1839 1022 **WYLD'S** is THE EARLIEST GUIDE I KNOW TO THE GREAT WESTERN, and certainly the G.W.R. had then hardly any need of a guide. It gives notes on the GUAGE, illustrations of AMERICAN PERMANENT WAYS and PILE LAYING. Mentions the STEAM WHISTLE, speaks of the ABSURDITY of HAWKSHAW'S report and of NICHOLAS WOOD "*amusing himself with experiments on the line with INGENIOUS TOYS*" (!) The guide has *illustrations and maps* and the work is both scarce and popular fetching 28/ recently at a London sale.

Wyld's Great Western, Cheltenham & Ct. Western, and Bristol and Exeter Railway Guide. 18° cl. 21/ 1839

1840

1023 **IN 1840 Freeling** wrote what he called *The Great Western Companion*, but only went as far as READING, the first proposed terminus. It includes the guide, a map, some woodcuts (one of old Reading station) and also an important

reference to *some ground pipes containing TELEGRAPH WIRES running for some miles and to be extended in use if the invention succeeds.* An affixed time table is missing. VERY RARE.

Freeling's Great Western Railway Companion. 18° 20/ 1840

LONDON AND SOUTHAMPTON (SO. WESTERN).

1839 1024 **MR. FREELING** wrote his *COMPANION* to the LONDON AND SOUTHAMPTON before that line changed its name to the LONDON and SO. WESTERN. It has a good little historical sketch opening with a tribute to MR. JAMES, and also to Messrs. Langton, Lloyd, and Easthope. Among the little woodcuts illustrating the guide is one of the curious little Richmond Theatre where KEAN and MRS. JORDAN often appeared. At the end are time tables from Vauxhall to Basingstoke. The work is now very scarce.

Freeling, Arthur, London and Southampton Railway Companion. With map, 18° cl. 21/ [1839]

[1840] 1025 **THE EDITOR** of **Wyld's GUIDE** to the So. WESTERN believed rather in extracts from "musty old books" than in "original nonsense" (vide preface), but for all that gave a good little historical account of the line, says its engineer, Mr. Giles, resigned in 1837 in favour of Mr. Locke, speaks of the coming Havre and Paris Railway, etc., etc. On p. 27 the Editor objects to Bye-Laws and fines for losing bits of blue paper usual on other lines. It is now a very rare little work.

Wyld's South Western Railway Guide. With maps, [200 pp. 18° cl. 21/ [1840]

1845.

1026 **A FEW YEARS LATER** the RAILWAY CHRONICLE issued as a folding sheet its TRAVELLING CHART to the line giving the usual numerous neat little woodcuts of scenes on the line, and a brief HISTORICAL DESCRIPTION in which it says that

the ENGINEERING CHARACTERISTICS of this line are LONG and STEEP GRADIENTS and ENORMOUS EARTHWORKS.

Railway Travelling Chart to Basingstoke and Gosport [and So. Western Railway]. 10/6 [circa 1845]

1845 1027 **MR. E. L. BLANCHARD** the same year produced *Bradshaw's Descriptive Guide*, not by any means free from odd remarks (e.g. "*An extraordinary compound of every variety of sounds is the peculiar property of impatient locomotives,*" and (p. 9) "*an absolute chaos of wood and iron, amidst which the guards . . . perform eccentric orbits*" (!) etc. The route is described, and there is a *Bradshaw's map* and an innocent puff of his *Monthly Guide*.

Bradshaw's Guide to the London and So. Western Railway. 97 pp. 18° wrappers, very rare, 21/ [1845]

1864 1028 **AND** for a later guide, copiously illustrated, we have:—

Measom's Illus. Guide to the So. Western Railway. 476 pp., p.8° wrappers, 5/ [1864]

1864

1029 **A PORTRAIT** of KING CHARLES I. and gilt edges beautified an edition of *Measom's London and So. Western Guide* with extension to *Conn-*
wall and Isle of Wight. From this

work one may note the many changes along the line of this last thirty years.

Measom's Lond. and South Western Guide. A fine presentation copy. 10/6 [1864]

MIDLAND COUNTIES.

1840 1030 OF THE TWO GUIDES to the OLD MIDLAND COUNTIES RAILWAY (one of earliest portions of the Midland Railway) the one by **TEBUTT** contains an old Time Table of the line, dated Leicester, July 21, 1840, a table of fares between Derby and Leicester and Rugby, time tables of the Lond. and Birm. and of the Grand Junc. A capital brief history of the line, an epitome of engineering facts connected with it, an illustrated guide, views of the Nott., Leicester and Loughboro Stations, a coloured map gradient section, curious old advertisements, illustrs. of signals, etc.
Tebbutt's Guide to Midland Counties Railway, p.8° wrapps. 21/ 1840

1031 & 1031A THE Guide to the same line issued by **Allen** is illustrated by better woodcuts and also by steel plates. Its views of the Stations are of great interest especially that of Derby Station, now the headquarters of the great Midland system. It also describes the *Lond. and Birm. and Birm. and Derby* routes.
[Allen's] Midland Counties Railway Companion. 135 pp. and 12 pp. of old advertisements, p.8° 21/ 1840
Ditto ditto With Time Tables of various lines, 135 pp. and 166 pp. of old advertisements, p.8° 21/ 1840

LONDON AND BRIGHTON.

1841

1032 THE LONDON and BRIGHTON (the forerunner of the London Brighton and South Coast) over which **RENNIE, STEPHENSON, GIBBS** and **CUNDY** fought so long and desperately, is a line of which everyone will like an early record. The small guide published by **Jobbins** gives a coloured map, a gradient section, a good, but brief, historical account of the line, and scatters throughout the descriptions of the route some very important little railway items.
[Jobbins'] London and Brighton Railway Guide. 18° cl. 21/ [c. 1841]

1033 FOR A LATER GUIDE to the same line, with some very interesting illustrations, such, for instance, as that of the Greenwich Junc. we have **Moasom's Illus. Guide to the Brighton and South Coast Rys.** p.8° soiled, but rare, 5/ 1853

AYR-1841.

1033A THE Guide to the Ayrshire line (opened 1840) published by **McCORMICK & GAMMELL**, at AYR, gives a good historical introduction, has a grand little plate illustrating the opening of the line, description of the classical Burns district, with curious old views, references to other progressing Scotch lines, etc.
Guide to Glasgow and Ayrshire Railway. 110pp. 12° cl., with map. 21/ 1841

EDINBURGH & GLASGOW.

1842 1034 IT WAS NO LESS MATTER to get from SCOTLAND to LONDON in 1842. Advertisements here enable us to see the different possible ways viz.—
 (a) *Steamer* to HULL, thence by **SELBY** and "MIDLAND COUNTIES Rys.
 (b) *DARLINGTON* by *Coach* thence by **NORTH of ENGLAND** and **MIDLAND COUNTIES Rys.** (c) *Steamer* to LIVERPOOL, thence by **GRAND JUNCTION** etc. or (d) *Coach* to LANCASTER thence by **GRAND JUNCTION** etc. Neat maps, carefully marked gradients, and an intimation that there are *Luggage Trains* for Third Class Passengers (!) add to the attraction of *one of the very first Scotch Railway Guides.*
Wilcox, J Guide to Edin. and Glasgow Railway. 18° 21/ Ed. 1842

SOUTH EASTERN

1844

- 1035 **AMONG SOUTH EASTERN GUIDES** the one by **Westerton** is of unquestionable interest from its Hints to Young Railway Travellers which, epitomised, are (1) *Buy a Brashaw's Guide (!)* (2) *Get a ticket and sit back to engine.* (3) *Buy a cap and put your hat away from "dust and wet" under the seat.* (4) *Provide yourself with eye glasses to avoid grit and blindness.* (5) *Bring a thick coat and a muffler and* (6) *And if other folks call thee "coddling" they will really be regretting THEY hadn't coddled.*
- Westerton, Chas. Bradshaw's Pleasure Guide to the South Eastern Railway.** 53pp. 18° wrappers, 21/ 1844

- 1844-50** 1036 **3rd** 1844 Mr. JAMES PHIPPEN wrote **Colbran's Guide to TUNBRIDGE**
1037 **WELLS** and gave at the end what he called *Descriptive Particulars of the South Eastern Railway* in about 25pp. with separate title page. And in the same year SMITH ELDER issued the **SOUTH EASTERN RAILWAY MANUAL** both good records of that date.
- Colbran's Guide to Tunbridge and Particulars of the South Eastern Railway.** p8° cl. 7/6 1844
Smith Elder's South Eastern Railway Manual. p8° cl. 7/6 1850

- [1853] 1038 **MEASOM'S** is a comparatively late Guide to the So: Eastern but has some most attractive little woodcuts showing the RAILWAY STATIONS and LOCOMOTIVES at date:
- Measom's Illustrated Guide to South Eastern Railway.** 104pp. p8° 6/6 1853

(SCOTLAND LOWLANDS)

1844

- 1039 **OF EARLY SCOTCH RECORDS** a little Handbook published by **Sutherland** at Glasgow (i.a.) gives the Time Tables for the Edinburgh, Garnkirk, Wishaw and Coltness, Paisley and Greenock and Ayr and Kilmarnock Railways in addition to Steamboats.
- [Sutherland's] Handbook for Tourists . . . in Scotland.** 24pp. 18° 10/6 1844

MANCHESTER, SHEFFIELD, AND LINCOLNSHIRE

- 1848** 1039A How comes a charming little sketch (by **Mr. Samuel Sidney**) of **Lincolnshire**, the eastern end of the M. S. & L. line, the county too from which sprang the GT. NORTHERN RAILWAY. And HORSES, Cows, Ploughmen, and Railways, surely never before made a better historical blend than in this fine little "Pickering" line side record.
- Sidney, Sam. Railways and Agriculture in N. Lincolnshire.** Rough notes of a RIDE OVER THE TRACK of the M. S. & L. and other RAILWAYS. 103pp. 18° cl. 10/6 Pickering, 1848

(A GENERAL GUIDE)

- 1851** 1040 Probably the first really elaborate RAILWAY GUIDE giving both descriptions of the works on the leading lines and the chief objects of interest by their side was **Churton's** work. He gives good descriptions of the principal works on the LONDON & BIRM., the GREAT NORTHERN, GREAT WESTERN, etc., etc., and has as special feature *numerous very attractive woodcuts of the chief residences* on the lines.
- Churton, Edward. The Railway Book of England.** 590pp. roy 8° cl. 10/6 1851

WHITEHAVEN & FURNESS (English Lake District).

- 852** 041 **JOHN LINTON** issued his little guide when the English Lake District had become almost surrounded by a railway. It has nice little *steel plates*, and was **THE FIRST** of the **LAKE RAILWAY GUIDES**.
Linton, John. Handbook to the **Whitehaven & Furness Railway**. With a map and twelve steel plates. 12° limp cloth, 5/ 1852

GREAT NORTHERN.

1854-7

- 042 The influence of the romantic **GREAT NORTHERN** may be traced from :— 5/ 1854
 043 **Mackie, Chas.** Itinerary of the **Great Northern**. 122pp. wrappers, 5/ **Meason's Illustrated Guide to the Great Northern.** 196pp. wrappers, 1857

THE GREAT MAIN LINE NORTH

- 858** 1044 **WHEN THE Andersons** wrote their little guide to the **INVERNESS AND NAIRN** Railway that line was an isolated one. Now it is a **PART** of the **GREAT MAIN ROUTE FROM LONDON** to the **ORKNEYS**. The booklet includes a brief history of the line, opened November 1855. The Co.'s **Time Tables for June 1856** are added.
Andersons' Handbook to the Inverness and Nairn Railway. 12° wrappers, 10/6 1856

PANAMA

1861.

- 044A "ON the 27th of January, 1855, at midnight, in darkness and rain, the last rail of the **Panama** line was laid, and on the following day a locomotive passed from ocean to ocean." So says Mr. **OTIS** on p 36 of his illustrated book descriptive of this famous railway, in one of the most interesting railway guides ever issued.
Otis, F. N. Illustrated History of the Panama Railroad. 263pp. 8° cl. 10/6 1861

NORTH EASTERN.

- 863** 1045 **MR. LANGLEY** OPENS HIS GUIDE with a view of "*The Rocket*" and the remark that the **NORTH EASTERN RAILWAY** may be said to run over the birthplace of the railway system, and to be . . . **THE MOST INTERESTING RAILWAY IN THE WORLD**. He gives 20 pp. of historical introduction, mentioning that "*Rocket*" was built under enormous difficulties, and that the **MAIL WAS FIRST SENT BY RAILWAY 11th NOV. 1830**.
Langley, J. B. Illus. Official Guide to the North Eastern Railway. 231 pp. p.8° wrappers, 5/ 1863

BLYTH AND TYNE

- 863** 1045A **MR. RICHARD WELFORD** in 1863 carefully compiled a Guide to the **Blyth and Tyne** Railway, on p. 53 of which he describes and illustrates **WILLINGTON QUAY**, where **George Stephenson** lived after his first marriage, and where his famous son **Robert** was born. Mr. Welford shows us on the site of the old cottage the **STEPHENSON MEMORIAL SCHOOLS**.
Welford, Richard. Handbook to Tynemouth and Guide to the **Blyth and Tyne Railway.** p.8° wrappers, 5/ [1863]

MEXICO.

- 1876** 1046 **ONE** of the most elaborate guides or histories ever published was produced in Mexico. There are 211 pages folio. The work shows that the Mexicans began railway building about 1842, when even English railways were few. It is written in English and illustrated by portraits of native engineers. It has tinted views of some grand scenery. And often close to the side of awful looking precipices we see the wonderful railway and its double-funnelled (? Fairlie) Locomotives.
Baz and Gallo's History of the Mexican Railways. Translated by Henderson. Maps, gradient table, views, etc., fol. 4f. cf. 21/ Mex: 1876.

SALISBURY AND YEOVIL.

- 1878** 203 **ABOUT** the date that the little "fourteen per cent." Salisbury and Yeovil line ceased to exist as an independant line, and became blended with the Great South Western trunk line to Exeter, Mr. Ruegg published its history. He refers to the naming of the "So.-Western," to the origin of the poor "Somerset and Dorset," and to numerous items of great interest in company history.
Ruegg, Louis H. The History of a Railway. 66pp. 8° 5/ Sherborne, 1878

The Maps.

- 1836** 204 **BIRMINGHAM RYS.** Messrs. WALKER in their map of Warwickshire in 1836 show BIRMINGHAM with only two railways, the "BIRM. and DERBY" not having yet secured their act.
 204 **Walker's Warwickshire.** Scale $\frac{1}{4}$ " to m. (14" x 16" folded into 12°) 10/6 1836
- 1837** 205 **"LONDON and BIRM."** Ten days after the first portion was opened CHEFFINS issued his little map showing line as far as BOXMOOR.
 205 **Cheffins' Lond. and Birm.** Scale $\frac{1}{2}$ " to m. $7\frac{3}{4}$ " x $17\frac{1}{2}$ " folded into 16°) 10/6 1837
- 1838** 206 **ON** the 1st Jan. next year, three months before the L. & B. opening to DENBIGH HALL, CHEFFINS issued his map to include that point and showed the projected line to AYLESBURY. Bound with it is also the Northern portion showing the Junctions with the "Derby," "Gloucester," and "Grand Junction" lines. This first edition having fare tables to include COACH FARES BETWEEN DENBIGH HALL and RUGBY (the unfinished portion) with distance tables and advts.
 206 **Cheffins' London and Birm.** 2 maps. (N. and S. portions bound together). Scale $\frac{1}{2}$ " to m. Folded into 12° 1st ed. 10/6 1838
- 1838** 207 **CHEFFINS' (L. and B.)** second edition included Time Tables, Rates for horses parcels and carriages and Fare Tables for Mail, Mixed, Night Mail trains and other distinctions and the first REGULATIONS. The TIME TABLES PROBABLY the FIRST PUBLISHED show eight trains both ways, four on Sundays, and no 3rd class. Cheap thro' fare 20/
 207 **Cheffins' Lond. & Birm.** 2 maps. 2nd ed. 15/ 1838

The Maps—continued.

1838 208 CHEFFIN'S Grand Junc. Map showed the proposed routes from CREWE to BIRKENHEAD and of the "Manchester and Birmingham" with its branch to CREWE. The tables affixed show time occupied, fares, distances by Road, Regulations and notices as to First and Mixed trains "both having seats on the roof for those who prefer it."

208 Cheffin's Grand Junc. Map. Scale $\frac{1}{2}$ " to m. Size $3\frac{1}{2}$ ft. \times 16" folded into 12° 15/ 1838

1838 209 DRAKE'S maps bound together take from London to Liverpool. They have fine little views of the old trains incl. the WILD FIRE Loco pulling the Reformer, the Conservative, and the Royal Mail with occupied carriage on truck and a baggage truck etc., gradient sections on maps, and to some are affixed Drake's Edition of the Regulations of various Co.s. with Fares, Distances, Officers of the Co.s. etc., including notices of the BOLTON, and of NORTH UNION.

207 Drake's Railroad Map. London to Liverpool etc. Size of maps 18" \times 8 $\frac{1}{2}$ " each folded into 18° 2nd ed. 15/ Nov. 1838

IRISH COMMISSIONERS ATLAS.

1838 210 OF Irish lines those from Belfast to ARMAGH, DUBLIN to DROGHEDA and to CARLOW and KILKENNY are shown with Acts. Further lines are now proposed from DUBLIN to ARMAGH, ENNISKILLEN, and to MARYBORO and thence to KILKENNY and HOLY CROSS dividing again to LIMERICK, CORK, and WATERFORD. On the MAP OF ENGLAND (dated May 1837) there are no lines shown as proposed north of NEWCASTLE or CARLISLE. Noteworthy proposed routes are those from CAMBRIDGE close to Lincoln, and through YORK to DARLINGTON, the LLANDUDNO, Port DYLLAEN (via Barmouth) and FISHGUARD routes (two courses from Llandover), the two lines between MANCHESTER and RUGBY, the four LONDON and CHELTENHAM routes, the two LONDON, SALISBURY, and TAUNTON routes, the five BRIGHTON routes, etc. And in addition to the Irish routes and this EXTREMELY VALUABLE map of England (it is perhaps the only one giving the five BRIGHTON routes correctly) there are various curious statistical railway maps of Ireland. **Atlas to accompany the Second Irish Commissioners' Report.** Six maps, Folio, cloth. £2 2/ 1838

G. W. R.

1838 211 THE same month (June) that the line was opened (as far as MAIDENHEAD, 22 $\frac{1}{2}$ miles from London) the Co. issued the plan and section below showing the line as far as Steventon.

G. W. R. Official Map and Section (to Steventon), Scale 1 m. to $\frac{1}{8}$ " ; size 2 $\frac{1}{4}$ -ft. sq. 21/ 1838

Wyld's Map of Great Britain.

1838 212 THE Map below shows ALL the ENGLISH PROPOSED ROUTES of the time including three lines to BRIGHTON, three to DOVER, "EASTERN" [? Northern and E.] from Cambridge to York, the S. WESTN. and "LONDON, SALISBURY and EXETER" ROUTES to Exeter, the NORTH and SOUTH JUNCT. (from S. W. R. near Odiham to Oxford and Birm., the PORTDLAEN Route, the two "MANCH. and BIRM." Routes, and three Routes to SCOTLAND: from Carlisle to Kilmarnock and Glasgow, from Hexham to Edin. and Glasgow, and from NORTH SHIELDS, not Newcastle, to Edinb. keeping close to the coast. Affixed is a list of

The Maps—continued.

Rys. finished, in progress, and proposed (the first two with lengths, capital and cost.

Wyld's Railroad Maps. Scale $1\frac{1}{4}$ " to m. ; size $2\frac{1}{2}$ ft. \times 2.
Folded into p8° 21/ 1838

EASTERN COUNTIES RAILWAY.

1838 212a **ABOUT** the time that **HEREPATH** (vide *Ry. Magazine* Vol V.) was exclaiming

"... who now do Eastern Counties rule?

"The self same men? Oh yes! but children-like from school

"With bottom whipt, they're now so meek and humble." [etc., very much etc.]

and when there was talk about that famous piece between **NORWICH** and **YARMOUTH** (for which a certain offer of £20,000 yearly was once (?) made) now having to be given up, and the great line having to stop short at **COLCHESTER**, a map was issued by **COL. COLBY** (1st Nov.) showing three routes from **COLCHESTER** to reach **YARMOUTH**. The East route is shown red and the cover is printed "EASTERN COUNTIES RAILWAY."

Eastern Counties Railway Map. Scale 1" to m. Size 2ft. \times 19" folded into 8° 21/

Bradshaw. (Great Britain.)

1839 213 **MR. BRADSHAW's** large map, dated 14th January, shows in **SCOTLAND** the **ARBROATH** and **FORFAR** running inland from **Arbroath** (**Aberbrothock**) to **Forfar**, and a line S.W. along Coast to **DUNDEE**, and from thence to **Cupar**; and from **GLASGOW** to **AYR**, **KILMARNOCK**, **GREENOCK**, etc., to **EDINB.**; thence a line to **ENGLAND** is projected to **NEWCASTLE** (via near **Bedlington**). The "Northern and Eastern" is here the project from **CAMBRIDGE** to **YORK**. On the sides of the map are numerous fine large gradient sections (and altitudes). including one of the "Stockton and **DARLINGTON**" line, while 30 pp. of details as to distances, levels, and gradients are prefixed. It was the best railway map published at that date.

Bradshaw's Railways of Great Britain. Scale 1" to 10 m. ; size $5\frac{1}{2} \times 3\frac{1}{2}$. First Ed. Folded into roy 8° £4 4/ 1839

Grand Junction, Manchester Extension, etc.

1839 214 **THE** map below includes the route of that curious project the "MANCHESTER EXTENSION," with which the *Ry. Times* said the "Manch. and Birm." line "were juggling the Potteries." [Vide *RY. TIMES*, 1839, espec. Dec. 21st and 28th].

Mogg's Map of the Environs of Birm. Liverpool, Manchester. Potteries and Preston, and the Railways in their vicinity. 28 \times 12-in. Folded into 18° 7/6 [1839]

GRAND JUNCTION.

1839 215 **ON** Osborne's Map besides the **GRADIENT** is a section showing the course of line previous to cutting, the **CENTAUR** loco pulling the **ANTILOPE**, **DESPATCH**, **The ROYAL MAIL**, a second-class, and a coach on truck (unoccupied). With time-tables and notices, dated 20 June, 1839, showing six trains, and no third class.

Osborne's Map. 2-ft. by 13-in., folded into 16° 10/6 1839

Published by Edward Baker, John Bright Street, Birmingham.

GENERAL MAP.

1839 216 **THE** Map below shows the English passenger lines for which Acts had been obtained, shows the "NORTHERN and EASTERN" to York, and the "MANCH. and BIRM. EXTENSION," both in outline. marks the little DARTMOOR RAILWAY and shows the line as if settled from NEWCASTLE to BERWICK (to the East of MORPETH and the later route) as part of the Great North-British Railway.

Betts' Map of England and Wales. 3½-ft. by 2, folding into case. 21/ 1839

GREAT WESTERN.

1839 217 **MR.** WYLD was always in time with his Maps and Guides. The present one, dated 1839, shows the G.W.R. complete to *Exeter*, and the CHELTN. and G.W. Union finished. And in his bird's-eye view of England *Leeds* is already accessible by the North Midland, *Dover* by the So. Eastern, and even *Norwich* by the Eastern Counties. He went by Acts.

Wyld's Great Western, Cheltn., Bristol . . Ry Map. Size, 20-in. by 13-in., folded into 12° 10/6 1839

London to Liverpool.

1839 218 **WYLD'S** little Map of the London and Birm. Grand Junction, &c., shows well the six branches from the Liv. and Man. and the G.W.R. now into Paddington, Gradient Sections, with Vertical Scale, &c.

Wyld's London Birmingham Manchester ... Railway. Map 19-in. by 16, folded into 18° 5/6 1839

BRIGHTON.

1840 219 **THIS** Map shows the course of the old "Wandsworth and Croydon Ironway," the junctions of the "Croydon" and "Greenwich" lines in 1840, and the course of the successful Brighton line.

Walker's London Croydon and Brighton Rys. Map. Scale 1-in. to m. Size, 4-ft. by 8-in., folded into 8° 10/6 [1840]

BRIGHTON.

1841 220 **THE** Map below, published Apr. 10, 1841, shows the Brighton line and the railways for some distance round London, including the little "Thames Junc." line, the "Thames Haven Ry." in outline, and Sections of the Croydon line (Gibbs, engineer), and of Brighton line (Rastrick, engineer.)

Jobbins' Map Brighton Railway. 30-in. by 18-in., folded into 18° 15/ 1841

Lizars. Scotland.

1842 221 **SHOWS** the two Forfar lines, and the lines from Edinburgh to Glasgow, Greenock, Kilmarnock, and Ayr; also lines to Ardrossan, Dalziel, and Dalkeith. The N.B.R. and the Caledonian (as "Proposed West Line") are outlined. Size abt. 3-ft. by 2.

Lizars' Map of Scotland with the Rys. (about 3-ft. by 2, folded 12°) 10/6 1842

IRELAND.

1842 222 **IN** 1842 there was only one railway opened in Ireland,

but the map below well illustrates the proposed routes at date.

Lizars' Map of Ireland. 1" to 10m. 3-ft. by 2, folded into 18° 10/ 1842

London to Liverpool.

- 1844** 223 **THE** Lond. and Birm. map below is earlier than that of the Midland lines (say 1842). The Midland map, shows the proposed Trent Valley, Leicester and Peterboro', Nottm. and Lincoln, and Ashton and Huddersfield routes. Also the old lines of 1844, and marks the stations between the London and B. at Blisworth, and via Derby up to Easingwold on the Gt. North of England (then the nearest route from London to York and Newcastle). **Cheffin's Maps to the North.** Abt. 29" by 8½ and 25" by 8¾. Two maps bound together. 10/6 1844

Cheffin's Map. England.

- 1844** 224 **THE** map below shows the country covered with projected lines before the amalgamation of the Midland Companies. It is probably 1844, and shows the approach if not the arrival of the Mania. **Cheffin's Map of Railways of England.** Scale, 3" to m. Abt. 2-ft. sq., folded into p8° 10/6 1844

Bradshaw Great Britain.

- 1845** 225 **VERY** striking evidence of a sudden mania for railways may be seen in the confused appearance of the sober and accurate Bradshaw's Map at this date. Wales was full of lines and mid-England was like an old spider's web. Still it gives an honest record of what was seriously intended. **Bradshaw's Rys. of Gt. Britain** (map same size as 1839 edition). Scale 1" to 10 m. 21/ 1845

LINCOLNSHIRE RAILWAYS.

- 1845** 225a **THIS** map is most VALUABLE for tracing the early history of the "GREAT NORTHERN" and neighbouring lines. The "GREAT GRIMSBY and SHEFFIELD JUNCTION" was the then only Lincoln line and joined Grimsby and N. Holland with M. Rāsen and Gainsboro. The proposed "E. Lincs. Ry." runs from Grimsby to Boston, the "LOND. and YORK," *East line*, running thence South to Boston and Spalding and the *West line* over its modern course. The proposed "Camb. and Lincoln" and "Direct Northern" run to Gainsboro and towards York. The SWINTON line is shown and several others as far as Leeds and Derby. **Map of proposed East Lincolnshire Ry.** Scale 1" to 3m. abt. 3ft. x 2, folded into p8°. 21/ 1845

MANIA MAP OF LONDON.

- 1845** 226 **DURING** the raging of the mania the "RAILWAY BELL" newspaper started and published a map to commemorate itself. The map was illustrated by a bell surmounted by a crown and embellished with a clock (!) under which was the legend "*Time, tide and trains wait for no man,*" and several views of stations, one very curious—old "Greenwich" perhaps. Portraits of the Queen and Prince Albert appear at bottom, while on the map itself the reverted K shaped (X) junction of the S.E.R., Brighton, Croydon, and

Greenwich lines is capitally shown.

"Ry. Bell" [Mania] Map of London. Abt. 3ft. \times 2½ on rollers. 21/ 1845

SOUTH WESTERN RAILWAY.

46 227 THE "SO. WESTERN" issued the plan below when their sanctioned or working lines reached to Salisbury, Dorchester, and Gosport and when they proposed to proceed to PLYMOUTH, TRURO, etc.

So. Western. Sketch Plan to illustrate Projected Extensions. 36" \times 18" 10/ Circa 1846

EAST INDIAN RAILWAY.

46 228 THIS Map of the proposed line to connect CALCUTTA with the N. W. Provinces was to accompany the Report of the "E. IND. RY Co.s" Managing Directory.

Map, East Indian Ry. Scale 10 m. to ¾" Size 4-ft. sq. Folded into case 21/ 1846

CALEDONIAN.

47 229 LIZAR'S Map of the "CALEDONIAN" Railway was ornamented with views, and was worthy of the important line then just opened. JOSEPH LOCKE and J. E. ERRINGTON it says were the Engineers; STEPHENSON and Co. Contractors.

Lizar's Guide to the Caledonian Ry. 27" \times 18" Folded into 12° 5/ 1847

Gt. BRITAIN.

48 230 THE SO. EASTN. has now formed the "CANTERBURY and WHITSTABLE," and has its Maidstone and Tunbridge branches; the So. WESTN. has reached Portsmouth, Dorchester, and Salisbury (via Winch.); the G. W. R. system is to Totnes, Newcastle is approached by the Stanhope and Tyne; Lynn, Norwich and Bury are reached; and Acts have authorised lines from Crewe through Shrewsbury to Newport, and the whole GREAT NORTHERN System.

Cheffin's Ry. Map of the Eng. and Scotch Rys. 1848 ed. 24 \times 28 into p8° 15/ 1848

GREAT BRITAIN.

49 231 MR. Wyld's Map shows continuous lines opened from PLYMOUTH to ABERDEEN no "So. WESTN." main line to Exeter, no "South Wales" line, and no "GT. NORTHERN" south of Retford.

Wyld's Railway Map of Gt. Britain. Size 3-ft. \times 2-ft. Folded into 12° 10/6

IRELAND. BETT'S MAP.

50 232 THIS Map shows lines completed to MALLOW for CORK, to LIMERICK, etc. It will, I think, be about 1850, and is "reduced from the beautiful six sheet map engraved under the superintendence of the Ry. Commissrs."

Bett's Map of Ireland. Scale ¾" to 5 m. About 2½ ft. by 2. Folded into 12° 10/6 [circa 1850]

Great Britain. Station Map.

- 1851** 233 **THIS** is far the most attractive map of the date not only showing the STATIONS but marking all the DIFFERENT LINES IN DIFFERENT COLOURS. It shows the "GREAT NORTHERN" and the "SOUTH WALES" lines in progress and a connection of railways from Plymouth to Aberdeen.
Macaulay, Z. Station Map of Rys. in Gt. Britain
 Scale 1" to 10 m., folding to roy 8° 21/ 187

LONDON.

- 1851** 234 **THE** erection of the Crystal Palace and the success of the "NORTH LONDON" influenced the extension of local railways this year and the map below shows proposed and existing lines round London, with notes on Cos. affixed.
Smith's Map (as above). About 2-ft. by 1½-ft., folding to 18° 5/

GENERAL MAPS.

- 1861** 235 **WYLD'S** Map of GT. BRITAIN shows the lines extremely well for 1861 and Stanford's Map of ENGLAND shows lines as in 1872.
1872 **Wyld's Railway Map** of Gt. Britain, folded into 8° 187
 3/
Stanford's Road and Railway Map of England, folded into a case, p8° 2/ 187

RAILWAY JUNCTIONS.

- 1870** 236 **TO** show the Junctions of lines with the railways coloured according to Companies there are Airey's Diagrams
Airey's Railway Junction Diagrams, oblong 8° 6/6 187
1875 Ditto ditto ditto 6/6 187

The Time Tables.

- 1825** 237 "**STOCKTON and DARLINGTON**" *vide* 165d p.46 *supra*
1835 237a "**BULL and SELBY**" *vide* 1002 p.58 *supra*
1837 237b "**GRAND JUNCTION**" *vide* 1008-9 p.59 *supra*

A MEDAL TIME TABLE.

- 1837** 237c **THE** oddities of the Railway "guiding" could scarcely further go" says *The Story of Bradshaw* p.21 "than the shape of a medal, marked with the 'times,' which the traveller could carry in his pocket, like a coin. Such a medal of white metal was issued 52 years ago thus inscribed [here follow times of trains.]" The one below however gives only first class trains, perhaps disdaining the "Mixed" trains, the spirit of the times. On the *Obverse* are shown the viaducts of the two lines leading into BIRM. with the words: Birm. Liv. & Manc. Grand Junc. Ry. begun 1835 opened July 4th 1837, cost £1,500,000. J. Locke, Engr. On the *Reverse* are given the names of eight stations their distances from BIRM. and the time taken to reach them together with the peripheral notice "1st class leaves Birm. at 7 o'clock ½ pt. 11 a.m.; ½ pt. 2 and 7 p.m.; 1st class leaves Manchester at Liverpool at ½ pt. 6, ½ pt. 11 a.m. and 2 and ½ pt. 6 p.m." These are the first "times" of 1837 (*vide* CORNISH & FREELING p.59 *supra*) and consider the medal of that date.

A "First-Class" Time Table Medal of the Grand Junction Railway. £2 2/ [1837]

39 237d **EARLIEST GENERAL TIME TABLES**" *vide* 1019 p.63 *supra*

The First North Midland Time Table.

10 237e **THE N. M. R.** was opened as far as Sheffield 11 May, 1840. The handbill below, dated next day, announced the opening and gave the times of the trains between Sheffield, Derby, Birm. and London. By coaching to the Y. and N. M. R. York could now be reached from London in a day. An MS. note says "Midland" [Mid. Counts.] was opened May 5th [but only from Derby and N. to Leicester.]

The First Time Bill of the North Midland Railway.
21/ 1840

Mr. GEORGE BRADSHAW.

This space was left for the portrait of Mr. Geo. Bradshaw published in *The Story of Bradshaw*, but on the eve of going to press we have been specially requested not to publish the old portrait. And a gentleman peculiarly well able to furnish the best possible portrait of Mr. Bradshaw and to clear up many points of interest with regard to the early issues of the "Companion" has kindly promised a special photograph for a future issue and certain information which we are most anxious to obtain.

10 237f 3N "*The Story of Bradshaw*," will be found a biographical sketch of the Geo. Bradshaw whose surname is universally known, and an illustrated description of his Earliest "*Time Tables*" and "*Companions*." Sir GEO. FINDLAY in his "*Working of an English Ry.*" and Mr. WILLIAMS in "Our Iron Roads," have both well described an early "Bradshaw," and Mr. FITZGERALD has gone thoroughly into the matter in his "*Story*" (*infra*). The latter mentioning the amazing scarcity of the earliest issues which as the *Engineer* lately remarked have been sold for their weight in gold. It is not however only the earliest issues that are rare but almost all the issues up to 1850. Speaking as one who has seen a large number of copies I can safely say that I have seen some "*Companions*" of 1840 and 1847, that I do not expect to see other copies of, and there are a few other early little publications of Mr. Bradshaw that £10 each could not buy. From a set of these little "*Bradshaws*" the development of the conveniences of passengers traffic may be traced better than from any source and a few 'landmarks' are mentioned below :—

THE GROWING PASSENGER ROUTES.

I have before me a set of thirty little "BRADSHAW'S COMPANIONS" ranging from October 1839 to November 1847, it may be of interest to describe the growth of the railways as there shown. [The numbers as used below are arbitrary ones.]

1839 (1) shows the now L. & N. W. R. represented by the little 'Manch. and Liv.' with the St. Helens and Runcorn Gap branches, and the 'North Union' to Preston; the LAN. & YORKS by the 'Manch. and Bolton'; the M. S. & L. by Manch. and Littleboro line; the 'NORTH EASTERN' by Leeds to York and Selby; and the MIDLAND by the 'Sheffield and Rotherham' line. In (2) the

L. & N. W. R. is rep. by the 'Grand Junc' and 'Lond. and Birm.' the G. W. R. reaches from Lond. to Twyford, we see the 'Newc. and Carlisle,' while the 'Birm. and Derby' via Hampton and the 'Nottm. and Derby' ('Mid. Cnts.') repres. the MIDLAND.

1840 In (3) the L. and SOUTH. WEST. runs to Southampton, the 'London and Croydon' repres. the L. BRIGHTON & S. C.; the old 'Stockton and Darlington' sends its tables; the 'Arbroath and Forfar' appears first for Dundee Districts and SCOTLAND; the 'NORTH. MIDLAND' and the 'Birm. and Gloucester' appear to complete the four chief divisions of the MIDLAND; the 'Mid. Cnts.' has reached Rugby, and the G. W. R. Stevenon. In (4) the G. W. R. is Wootton Bassett and from Bath to Bristol; the famous 'York and North Midland' (now NOR. EAST.) from Derby to Leeds appears. the GREAT EASTERN is seen in 'Northern and Eastern' to Broxburne; Birkenhead and Chester are reached; and the 'Glasgow and Ayr' and 'Paisley and Renfrew' come first for Glasgow District, and second for SCOTLAND.

1841 In (5) 'Taff Vale' appears first for WALES; In (6) the LANC. and YORKS. is complete as the 'Manch. and Leeds'; the 'Gt. North of Eng.' (from York to Darlington) comes in as the first part of the present East Coast route; the Glasgow and Greenock appears; and the famous 'Eastern Counties' (having its act as the biggest English railway) is open to Brentford. In (8) the G. W. R. is complete, having reached Bristol, and a connecting line has reached Cirencester for the North and Wales. In (12) Brighton is reached from London. In (13) trains can run from Brighton, through London, Derby, York, and Darlington, and thence over the first passenger line to Stockton, and on through Hartlepool and Sunderland to Newcastle-on-Tyne.

1842 In (15) the G. W. R. has its connection to Bridgwater; (16) trains run from Derby to Birm. direct, and the 'Edinb. and Glasgow' is open; with (17) the SOUTH EASTERN appears to Tunbridge (via Reigate). By (18) there is the first Irish line (for Bradshaw) from Belfast to Lisburn; and Willesden appears on the Lond. and Birm.; in (19) the famous Manchester and Birm. is complete, and 'Dublin and Kingstown' is shown for Ireland. [The last lot No. 19 it may be noted is a London edition].

1843 Of the next four issues (all published in London) we see in No. 20 that the S. E. R. is at Ashford, that the Lond. and Birm. trains are improving in speed; and that the curious York and Newcastle route is very clearly shown. In (21) the G. W. R. System extends to Beam Bridge. In (22) the S. E. R. reaches Folkestone; and in (23) the railway has crept down the Cumberland coast to Maryport.

1844 With (24) Exeter is reached, and the S. E. R. is at Dover; by (25) the G. W. R. has its Oxford branch, the West London is open; the York trains run straight to Gateshead opposite Newcastle and $2\frac{1}{2}$ hours are saved over the roundabout Stock. and Darln. route.

1845 In (28) the Grand. Junc. has extended to Lancaster; a railway has appeared in Cornwall (Redruth) passing the famous Camborne.

1847 In (29) Jan. issue the railway has extended from Exeter to Newton; the L. and N. W. R. has been formed, and branched to Peterboro. The West Coast route extends to Carlisle. The 'Midland' since its amalg. has extended to Lincoln, and the East Anglian appears. The Manch. and Leeds is completed and extending. The N. B. R. runs from Edinb. to Berwick, and the Irish 'Great Southern and Western' to Carlow. One of the first things to notice in the Nov. issue (30) should be the Canterbury and Whitstable now connected with the South Eastern, from whence lines run to the Leic. and Swann., GEO. STEPHENSON could at last ride from one to the other, and the times of both old lines are now given: the L. and S. W. is at Salisbury and Dorchester: the 'Trent Valley' appears; the East Coast is complete except for the Border Bridge, locomotives have reached Windermere; run along the picturesque Old Whitby and Pickering; and through almost every important centre except the unfortunate Staffordshire Potteries.

Bradshaw's Companions.—Nos. 1 and 2 can only be supplied in facsimile. All the remaining copies are 21/ each, except Nos. 4, 21, 23, 29 and 30, which have been kindly lent us only for collating purposes from the fine collection of Mr. SMITHSON.

BRISTOL AND BATH.

1843 237g **THE G.W.R.** opened from BATH to BRISTOL Sept. 1840. On the approaching completion of the line at both ends John Hayward of Bristol issued an 8pp. leaflet, ballad like in shape, and "poetical" prose in nature, describing a walk down the line, and the works on the way. At Saltwood Tunnel he speaks of the loco "MERIDIAN" made by Hawthorns the builders of the "SUN" and "SUNBEAM" running at east end of line. At BRASS MILLS the line is nearly complete and when he arrives at the BATH viaduct he says "The G.W.R. has thus far been completed." At the end he gives times of starting the up trains running at each hour between 8 and 8 except at 1 and 3; there are ten up and eleven down, 6 or 7 calling at KEYNSHAM. (Fares (1st) 2/6. Bris. to K. 1/6. Bath to K. 2/-). Probably the only copy in existence. **The Bristol and Bath Railway Guide.** 8pp. with view of loco (NORTH STAR style). 21/ [1840]

Germany and Belgium.

844 238 **THERE** is a very neat little combined ATLAS and TIME TABLES "contenant le service complet de toute l'année, ainsi que les tarifs, réglemens, et ordonnances qui y ont rapport, avec les cartes spéciales des principaux chemins de fer." The numerous little maps are coloured. I see that on a Berlin line one was not allowed to SMOKE in a 1st class carriage at all; but in a second if not objected to. **Hendschel.** Atlas des Chem. d. Fer de l'Allem., de le Belgique, et de L'ALSACE. About 200 pp. 16° 21/ 1844

COMIC BRADSHAW.

848 238a **THE Comic Bradshaw**—very comic, but as for Bradshaw? Well Mr. Reach perhaps forgot that—except to show the 9.20 train to JERICO, etc. Mr. HINE shows some passengers who could take *most* men out of the mumps. The text itself claims that it contains
 "Parodies which make men grin"
 "Funny cuts which draw the tin."
Reach, A. B. **The Comic Bradshaw.** Illus. by Hine. 64pp. 18° wr. 25/ [1848]

WILTS AND SOMERSET.

848 238b **THE** extravagant mania days had passed when the W. & S. opened and it began life by feeling the pinch of the times. The paper below announces the opening of the line, gives times, connections with Padd. and Exeter trns., fares etc., and states that the trains run in connection with the "LONG TRAINS" of the G.W.R. (with which Co. it amalgamated). **Opening of Wilts and Somerset Ry., Chippenham to Westbury.** Sheet of Times and Fares. 10/6 5 Sept. 1848

FIRST SCOTCH "A. B. C."

849 239 **THIS** interesting old sheet, the first one arranged according to towns, showed fares, names of the railways,

times of starting (with extreme lucidity under "Morning," "Afternoon"), Coaches and Ferries were given, while the "CALEDONIAN" announced a reduction of fares between Edinb. and Glas., and the STIRLING and DUMFERLINE "a Call" of £2. There were three routes between Edin. and Glas. (two by "E. and G.") Fares to Berwick and to Carlisle six prices. The stated speed per mile express 2 min.; mail $2\frac{1}{2}$; ord. and parl. 3 min. A fine memoir of railway Scotland in 1849.

Redpath's Edin. and District Time Tables. No. 1 and No. 3. Dec. 1849 and Feb. 1850. Each 8 pp. 4° sewn, 5/

Manchester Railway Guide.

1851 240 THE tables below form an A. B. C. guide to 104 Stations. Out of these 39 belong to the "Lancashire and Yorkshire" Ry. (showing its early importance to Manchester), 34 to the "L. and N. W. R."; 16 to the "East Lancas." and 15 to the "M. S. and L."

Bradshaw's Manchester Ry. Guide. No. 11, May 1851 16 pp. and map, 8° in new boards, edges found cut. Very uncommon, 10/6

DUNDEE.

1857 241 THE neat duodecimo tables below show some noteworthy points of the early Scotch system, such as the Family Season Ticket, and cheap return Pleasure Party Tickets. Smoking is not yet allowed, and people still travel in their own carriages. Cheap Sat. Excursions are run to Edin., and lines run south to LONDON and north to ABERDEEN. Among advts. an Edinb hotel invites Dundee custom with:

"Good beds, well aired—strong coffee, tea,
Soups, steaks, chops, fish, as your taste may be.
The parlours comfortable—clean,
Where daily may the news be seen."

Dundee and Arbroath Ry. Time Tables. The 12 issues of 1857, bound, 12°, in one vol. 10/6

The Story of Bradshaw.

1890 241a MR. Percy Fitzgerald, the industrious author of *The Book Fancier*, says in the pages below that "there are but few instances, of every single copy of a book having altogether disappeared, even in the case of those published centuries ago. Yet it is extraordinary to find that the earliest impressions of "BRADSHAW'S COMPANION" should not be forthcoming, and these but a few specimens belonging to a single year, 1839, should have remained. . . Play bills . . . some over two hundred years old, have still contrived to survive having, as it were, 'nine lives,' but the more substantial 'Bradshaw' seems not to have come down, as Sterne says, 'the gutter of time. And yet they were books in regular form, bound in cloth . . . and there was merit enough in the neatly executed plans, maps, &c., to ensure their preservation. Of these rare little volumes, there is no copy in the British Museum. . . ."—pp. 25-26.

Fitzgerald, Percy. The Story of Bradshaw's Guide. 76 pp. 16° 1/ post free 1890

History of Locomotion.

Steam Carriages.

"*Steam Locomotion had its Birth on the Common Road.*"—W. B. ADAMS.

Below will be found some special descriptions of OUR EARLIEST LOCOMOTIVES (Steam Road Carriages), pushed at first as competitors, and afterwards as adjuncts, to railways. The following are modern references to the subject:—

["In March, 1859], Lord Stafford's little engine started from Messrs. Haye's Works, Stoney Stratford, with the Marquis of Stafford, Lord Alired Paget, and two Hungarian Noblemen. They proceeded through the town at a rapid pace, and after a short trip returned to the Wolverton Railway Station. The trip was in all respects successful; and shows, beyond a doubt, that steam locomotion for common roads is practicable." (i.e., Without rails and for passengers.)—The "Engineer," March, 1859.

"Steam power on common roads to carry Merchandise would only cost half what horses do."—The "Engineer."

"Steam coaches can work 50 miles of road for about the cost of 2 miles of railroad."—Young (p. 150).

Dates of Carriages.

Cugnot	1769	Trevithick	1804
Evans	1772	Griffiths (by Bramah) ..	1821
Murdock	17	Gordon	1822
Symington	17	Gurney	1822

DRAWINGS.

828 242 THE Geometrical Drawing below gives a plan and elevation of GURNEY'S CARRIAGE (about 15" x 18"), and with it is the elevation of another Steam Carriage (24 x 18)
Two Drawings of Steam Carriages. 10/ 1828

GURNEY.

829 243 GURNEY was the first extensive projector of Steam Carriages. Dr. Lardner devotes many pages to him in his 7th edition of "The Steam Engine," 1840. In the following pages no less a man than JOHN HERAPATH, the accomplished editor of the *Railway Magazine*, describes the advantages of Gurney's Carriages to the Duke of Wellington.
Herapath (John) on Gurney's Steam Carriage. 48pp.
8° 21/ 1829

COMMONS' REPORT.

831 244 BELOW IS AN ORIGINAL ABSTRACT of the celebrated REPORT OF THE COMMITTEE of the *House of Commons* on "Wheeled Vehicles propelled by Steam or Gas."
Abstract of Report on Steam Carriages. 16 pp. p8°
21/ 1831

GORDON.

832 245 MR. David Gordon's son Alexander, a Civil Engineer, in 1832, published an *historical account* of STEAM CARRIAGES to date with reference to all the chief steam carriages and with illustrations of the LOCOMOTIVES of TREVITHICK, BLENKINSOPP, HEDLEY (stated here to be CHAPMAN'S) GRIFFITHS, GIBBS, GORDON'S, and others. It is also valuable as giving a good account of the *House of Commons Committee EVIDENCE FOR STEAM CARRIAGES*.
Gordon, Alex. *Historical and Practical Treatise upon Elemental Locomotion.* 192 pp. and plates. d8°
15/ 1832

Commons Report on the Steam Carriages.

- 1832 245A THE report below includes the evidence of GURNEY, HANCOCK, FAREY (who prepared specifications for the two former), RICH. TREVITHICK, GILBERT, M.P., OGLE, GORDON, GIBBS, TETFORD, STONE, M'ADAM, MACNEILL, TORRENS, M.P., and decision in their favour.
Commons Sel. Com. Report. 118 pp. folio. 25/

28 June 1832

GORDON.

- 1834 246 TWO years later Mr. GORDON brought out a second edition with a slightly altered title, but with so many additions and alterations as to make a new book. He speaks of *Earl Dundonald's* (LORD COCHRANE'S *application of a rotatory engine to a steam carriage*, MURDOCH and GORDON'S combined experiments (with good explanation of COMPRESSED AIR PRINCIPLE), ERRICSSON'S *Caloric Engine*, GORDON'S *Cogwheel loco. working inside a drum* (illustrated), GURNEY'S and other *Carriages*. Gives good articles on Boilers, on the HISTORY of STEAM CARRIAGES, and some interesting points about ROADS, RAILROADS and LOCOMOTIVE APPLIANCES. *Many illustrations.*

Gordon, Alex. *Treatise upon Elemental Locomotion.*
 326 pp. d8° 10/6

1834

Commons Report on Gurney Case.

- 1834 246A THESE papers, dated 17 July, 1834, give the Minutes of Evidence by G. GURNEY, HANDLEY, M.P., DADY, S. GURNEY, BULNOIS, ELLIS, WARD, BAILEY, ALEX. GORDON, THISTLETON, Drs. FARRADAY and LARDNER, M'NEIL, and WM. POOLE. On the opening page Mr. Gurney refers to his visit as a youth to VIVIAN, and to seeing TREVITHICK'S experiments. In a further report of 10 July 1835 the Committee credit Mr. GURNEY for first practical steam carriage, and an account of his occupation and a review of evidence are given.

Select Committee Report on Mr. Gurney's Case.
 88pp. folio

1834

DITTO, 34pp. folio. 1835. 2 vols. 42/

MACERONI'S CARRIAGE.

- 1835 247 COLONEL MACERONI'S Steam Carriage power consisted in NINE ROWS of UPRIGHT CYLINDRICAL TUBES, each row containing nine tubes so he had got his 81 tubes proposed in 1833 but not the steam blast. From the work below by the "highly gifted" Colonel much useful information and amusement may be derived referring to the good old days of Steam Carriages.

Maceroni, Col. (late Aide de camp to Murat, King of Naples) *Expositions and Illustrations of Steam Power* with description and view of his Steam Carriage. 126pp. d8° 25/-

1835

LORD'S S. C. REPORT.

- 1836 247A THIS is a Lord's Select Committee Report on a Bill to repeal prohibitory Tolls. Mentions that considerable pro-

gress has been made, and that they can now travel with great rapidity. Evidence on shape and size of steam generators has been conflicting. No great damage from sparks. Much more difficult to guide than a Ry. Loco. Only useful for Passengers. Some experienced Engineers against them. Prohib. Tolls undesirable, but encouragement will only give rise to wild speculation. Messrs. GURNEY, HANCOCK, GORDON, GEORGE STEPHENSON, PALMER, Wm. CUBITT, J. BRAITHWAITE, give evidence.

Lords' Report on Steam Carriages, 19 July, 1836.
99pp. folio. 21/ 1836

HEBERT.

1836 248 **F**OR a complete account of ALL THE OLD CONTRIVANCES for Locomotives and Railways there is no work to beat LUKE HEBERT'S ENGINEER and MECHANIC'S ENCYCLOPÆDIA. There are described (besides numerous other inventions) all the Old Locomotives, the Steam Carriages, the Waggon, and Brakes, Propellers, Inclined Planes, edge and tram railways, suspension and serrated railways, railways pneumatic, railways wooden: *two hundred pages* are devoted to these subjects, and the early locomotives, *profusely illustrated* (and views are given on the "Kingstown" and on the "Greenwich" railways).
Hebert, Luke. Engineer & Mechanic's Encyclopædia
with 200pp. on Railways. 2 vols. 8° 30/ 1836

HEBERT.

837 249 **H**EBERT'S Practical Treatise on Railroads. (The same as the article in the *Encyclopædia* above but with the addition of a *frontispiece* view of the "Birm. Bristol and Thames Junction Railway" ("*The Silent Railway*") near Holsden Green. The illustrations in this [and in the ENCYCLOP.] include those of Baynes, Palmer, Barry, GRIFFITHS, Gordon, Burstall, James, Snowden, Fisher, Gurney, Easton, Holland, Dick, Wright, Kave and Boase, Dodds (Glasgow), Redmund, Hicks, Butters Bacon, Saxton, Squire and Macaroni, Stephenson, etc.
Hebert, Luke. Practical Treatise on Railroads.
216pp. d8° 32/6 1837

HANCOCK.

838 250 **H**ANCOCK "can hardly be surpassed even at present day" said Young (who devoted several of his pages to this inventor). His coaches proved their capability by running four months without intermission one of them cost £1500, carried 22 passengers, and burnt twopennyworth of coke per mile. This was about 1836 when locomotive building was in its babyhood.
Hancock, Walter. Narrative of Twelve Years' Experiments (1824-1836) with Steam Carriages on Common Roads. Illustrated. 104pp. d8° 25/ 1838

GORDON ON MONOPOLIES.

841 251 **T**HERE is something of romance in the work below. David Gordon published the *first magazine devoted exclusively* to LOCOMOTION, and his son's book below was, I believe, the LAST EVER WRITTEN SUPPORTING STEAM CARRIAGES IN PREFERENCE TO RAILWAYS.

Gordon, Alex. Observations on Railway Monopolies.
57 pp. 10/6 1841

YOUNG.

- 1860** 252 **MR. Young** (with Mr. Holley) brings the Subject of **STEAM CARRIAGES** down to 1860. He pleads that whatever work **HORSES** can do **STEAM** *can do better*, and deals with **ECONOMY** of the subject, devotes over 50 pages to the old **STEAM COACHES**, including Cugnots (illustrated), *the First Locomotive ever made* [1769], discusses **CONCENTRATED WEIGHT** and the advantage of **DISTRIBUTED WEIGHT**, explains **BOYDELL'S Wonderful TRACTION ENGINE** and **ENDLESS RAILWAY**, the use of Engines for **AGRICULTURE**, for **WAR** in **INDIA** as substitutes for **ELEPHANTS** describes the **UNITED STATES STEAM CARS**, etc., explains **HOUSE OF COMMONS REPORT** on Steam Carriages, gives 20 pages on Subject of **COST**, etc. and devotes 8 pp. to **Thos. GRAY**, "the railway prophet." *Numerous illustrations.* A **CAPTIVATING INSTRUCTIVE LITTLE WORK.**
Young (and Holley) Steam on Common Roads. 417pp.
 8° 7/6 1860

REFERENCES.

SEE ALSO *The Mechanics' Magazine*, *The American Mechanics' Magazine*, *The Register of Arts* (Hebert's) and *Repertory of Arts* (Wyatt's) under **MAGAZINES**; under **LOCOMOTIVES**; and under **BIOGRAPHY** (Trevithick).

Adams on Carriages.

- 1837** 253 **THE Editor** of the "*Mechanics' Magazine*" was so pleased with **ADAMS'** work on **PLEASURE CARRIAGES** that he wrote a review of it extending over 30 columns. Carriages have a wonderful history and "**Mr. Adams**," says the Editor, "has told it more agreeably than it will ever be told again." He notices **HANCOCK'S STEAM CARRIAGES** and expects further improvements. "**STEAM** will do," he says, "for **PUBLIC**, BUT NEVER FOR PRIVATE VEHICLES," but he thinks railways now worked at 25 **MILES AN HOUR** will beat everything of steam. He makes a curious Statement as to the origin of the width of railway carriages.
Adams, W. B. English Pleasure Carriages. Illus.
 d8° cloth. 10/6 1837

Street Railways.

- 1836** 254 **TWO** marked features of the book below by **FAIRBAIRN** are his advocacy, and his illustrations of, **STREET RAILWAYS** (by steam locomotion) and his proposals for **CONNECTING SCOTLAND WITH IRELAND.** and **ENGLAND WITH FRANCE** by **RAILWAYS OVER THE SEA.** His Street Railways include **OVERHEAD RAILWAYS.** He grumbles at the "*Greenwich*," the "*Southampton*," the "*London and Birmingham*," and "*Great Western*," as premature, but is a strong advocate for economical railways on roads. 248 pp. ably written and full of interest.
Fairbairn, Henry. Political Economy of Railroads.
 d8° 30/ 1836

BIRKENHEAD. LEE.

- 1860** 255 **LEE AND NIGHTINGALE.** Report of **BANQUET** given by **G. F. TRAIN**, of Boston, U.S., at the opening of the **FIRST STREET RAILWAY** in **EUROPE** (at Birkenhead, England) with account of line, opinions of the press and names of monarchs and nobility invited. With view of **TRAM CARRIAGE.** 117 instructive and comical pages.

Birkenhead Tramway Opening. d8° cloth. 10/6
Liverpool, 1860

AMERICAN. KING.

1866 256 **SIX** years later Mr. P. S. KING published 56 pages briefly describing the different TRAMWAYS OF AMERICA, Reports from 12 towns dealing with fifteen points.

Facts Respecting Street Railways. d8° wrappers,
7/6 London, 1866

BRIGHT.

1868 257 **MR.** HERBERT BRIGHT in 1868 proposed a plan for London Tramways in which the Coaches could leave the rails without inconvenience.

Bright, H., C.E. Remarks on Street Tramways as applied to London, 15 pp. and plates. 5/ London, 1868

The Atmospheric System.

"Succeeded perfectly . . . the smoothness and luxury of travelling unequalled. With a little more perseverance all difficulties might have been overcome . . . I should not be surprised if ultimately the atmospheric system comes to life again."
—Autobiography of Sir John Rennie.

First Modern Atmospheric Principle.

1812 258 **MR.** G. MEDHURST made the first modern suggestion for an ATMOSPHERIC RAILWAY two years before GEORGE STEPHENSON completed his first Locomotive. In the curious old pamphlet below he had the hardihood to propose to send passengers along wholly encased in an air tight tube at the rate of a mile a minute. *It was probably the first serious suggestion ever made of anything approaching that speed.*

Medhurst, G. Remarks . . . to prove the practicability . . . of . . . the rapid conveyance of goods and passengers . . . through a tube . . . by Air. 18pp.
Very rare. £3 3/ 1812

1826 259 **SEE** PARTINGTON (under Steam Navigation) for BROWN'S GAS ENGINE.

Atmospheric System. Medhurst's.

1827 260 **FIFTEEN** years after he first publicly paid what he called his "adoration to this aerial and invisible deity "MEDHURST" brought out another description GOING MORE INTO DETAIL and adding ILLUSTRATIONS. [Together with CATALOGUE of forty-two DIFFERENT KINDS OF SCALES for Sale from £2 to £150 by G. MEDHURST, Ironfounder and Engineer, Denmark St. Soho.]

Medhurst, Geo., Civil Engineer. A New System of Inland Conveyance. 38pp. 8° wrappers. VERY RARE.
£2 10/ 1827

Mann's Atmospheric System.

1830 261 **MR.** Wm. Mann in 1830 proposed an Air Engine with a curious arrangement of several pumps of different capacities. His machines entailed altogether a COST of £1500 each and expenses of one equal to a four horse coach would cost less than ONE PENNY PER MILE. At 14 atmospheres pressure a carriage would go 14 miles; at 48, 23 miles; at 64, 34 miles. He could send a 2 cwt. RAILWAY steam carriage from L'pool to Manch. for one penny.

Mann, William. New Method of Propelling Locomotive Machines with frontispiece showing very neat coach 'ready charged.' 56pp. 8° 21/ 1830

Atmospheric System.**First Practical Use. Clegg.**

- 1840** 262 **MESSEES. CLEGG & SAMUDA'S** System the first ever put into practical use was at work on the "SILENT" Railway in June and July 1840 and the following pages refer to trials showing the advantages of the new system. *Illustrated with a folding plate depicting carriages, tubes, etc.*
Clegg and Samuda's Atmospheric Railway. 23pp. 1840
 25s

Irish Atmospheric Railway. Pim.

- 1841** 263 **MR. PIM'S** Letter to **EARL RIPON** (President Board of Trade) in explaining advantages of **ATMOSPHERIC SYSTEM** referred to **PREJUDICE** against system, to expense of **COKE**, and to advantages of **STATIONARY ENGINES** every three miles, offering **STEAM POWER FOR HIRE** to **GRIND OATS**, **SAW WOOD**, **DRAIN LANDS**, etc., and available eight hours out of every twelve.
Pim, Jas. Letter to Earl Ripon, 26 pp. With valuable plates illustrating construction of line, Clegg and Samuda's Carriages, etc. 8° 21/ 1841

Irish Atmospheric Railways. Pim.

- 1841** 264 **MR. PIM**, Treasurer of the Dublin and Kingstown Ry., here addresses **LORD MORPETH** on his introduction of a Bill for a **STATE SYSTEM OF IRISH RYS.**, and single lines being necessary advocated the **ATMOSPHERIC SYSTEM**, particularly between **KINGSTOWN** and **DALKEY**, and says **CLEGG** and **SAMUDA** have got over **MEDHURST'S** "*impracticable water valve*." It is the fastest, safest, and cheapest system. He refers to **MR. VALANCES PROPOSED SPEED OF 200 MILES PER HOUR** and limits to 1000 **MILES PER HOUR**.
Pim's Letter to Lord Morpeth, 15 pp. hf. cf. 21/ 1841

Smith and Barlow's Report.

- 1842** 264a **THIS** Report states conclusions arrived at, details of experiments and **Pim's Letters** to **Lord Ripon**.
Smith & Barlow's Report to Board of Trade. 19 pp. folio. 21/ 1842

The Irish Atmospheric Railway. Bergin.

- 1843** 265 **MR. PIM** was joined by **Mr. Bergin** in advocating the Atmospheric between Kingstown and Dalkey on account of the inclines, **CURVES**, etc., and here details the reasons for his advocacy, and answers **Sir Frederick Smith's** and **Prof. Barlow's Report**.
Bergin, T. F. Observations on the . . Atmospheric Railway. 86 pp., 8° 21/ 1843

ATMOSPHERISCHE. BECKER.

- 1844** 266 **AT FRANKFORT**, in 1844, **FRIEDRICH BECKER** collected and translated the reports of **Smith**, **Mallet**, **Samuda**, **Pim**, etc.
Becker, F. Die Atmospharische Eisenbahn, 48 pp. with plate, 8° 5/ 1844

Kingstown and Dalkey Line.

1844 267 AFTER a description of the Dublin and Kingstown line the little work below describes the Dalkey line, the gradients, and the pumping engine.

New Picture of Dublin. 352 pp. map, etc. 4/ 1844

Commons' Select Committee Report.

1845 267a THIS includes Report, Proceedings, Minutes of Evidence and Appendix (Accidents) including the questions of Accidents, Gradients, LEAKAGE, Lines of Rails, Maintenance of Roads, Stationary Engines, Speed.

Select Com. Rep. with Appendix. 2 vols, folio, 195+33 pp. 25/

L'air Atmospherique. Dubern.

1846 268 AND TWO YEARS LATER, at PARIS, H. A. DUBERN published a *résumé* of the OPINIONS OF FRENCH AND ENGLISH ENGINEERS on the subject.

Dubern, H. A. De l'application de l'air atmospherique aux chemins de fer. 81 pp. 7/6 1846

Atmospheric. The System Explained.**TURNBULL.**

1847 269 AFTER ROBT. STEPHENSON had reported against the Atmospheric System Mr. J. BOURNE, then Editor of *The Artizan*, requested Mr. WM. TURNBULL's opinions for his magazine. In the work below he enters into the theory of the system, deals with what he considers the important matter of LEAKAGE, and refers to Clarke and Varley's improvements in DISPENSING WITH THE LONGITUDINAL VALVE.

Turnbull, Wm. Essay on the Air Pump and Atmospheric Railway. 96 pp. 18° 10/ 1847

Electricity. Expansion.

Steam PROJECTILES of 1823. Under 10 per hour.

"As soon would the Woolwich people trust themselves to be fired off one of Congreve's Rockets as trust themselves to the mercies of such a machine (locomotive) . . . at such a rate."—Quart. Review, 1823.

ELEC. PROJECTILES of 1893. Over 1000 miles an hour.

"With the electric motor a speed of 1000 miles an hour could be obtained and they could even do greater things still, though beyond that point they perhaps entered the region of projectiles rather than locomotives."—Daily News, 25th Feb., Dr. Hopkinson at the Royal Inst. 24th Feb. 1893.

LIQUID EXPANSION.

1839 270 LOCOMOTION by the amazing EXPANSIVE FORCE of a CERTAIN LIQUID is referred to and connected up with the authority of SIR HUMPHREY DAVY on p. 271 of a most interesting little work on the

Roads and Railroads of Ancient and Modern Countries. Published by Parker in 1839. 12° 10/6 1839

Liquid Air.

1845 271 BY dropping "liquid air" into 2½ gallons of water Wm. Evans hurled 20 loaded waggons along at the rate of a mile a minute. For further particulars see No. 304 of the "Statistics" below.

Salt, S. Statistics and Calculations [on] Railways and Canals. d8° cl. 15/ 1845

Steam Engines.

WATT and BRAMAH.

1797 272 **ACCORDING** to YOUNG, JOS. BRAMAH (inventor of the "press;" and the "Patent Brahmin" of "Sam Weller" in *Pickwick*) was the inventor of the **FIRST STEAM CARRIAGE BUILT EXPRESSLY** for PASSENGERS. Below he is stoutly defending one of the **HORNBLOWERS** for infringing a Patent of JAS. WATT'S.

Bramah, Jos. Letter to Sir Jas. Eyre. With loose biog. 97 pp. 8° *hf. bnd.* Very Rare. £2 2/ 1797

SMEATON'S REPORTS.

1812 273 **IT** was under SMEATON, the builder of the Eddystone Lighthouse and the acknowledged head of British Engineering that the first railway engineer, JESSOP, was trained. Mr. SMEATON made the first portable engine, stated in the well-known **REPORTS** below that he could remember those very early tramways the first ever laid down in Yorkshire (see Vol. II. 375); and suggested the first public railway at Loughboro.

Smeaton, John. Reports made on various occasions. With portrait and plates. 3 vols, 4° cloth. £2 2/ 1812

CONGREVE.

1819 274 **THE CONGREVE ROCKET** figured prominently in the famous *Quarterly Review* article on Railways in 1825. It is interesting to have a memento of Sir William's own cheap Steam Engine even though not a locomotive. Whether George Stephenson thought of Sir William's famous Rocket when he christened his winner at Liverpool I am unable to say.

A short account of Sir William Congreve's Patent for a Steam Engine. 43pp. *table, and plates*, 8° 17/6 1819

STUART'S ANECDOTES.

1829 274a **IF** and away the most delightful little work by which to trace the **DEVELOPMENT** of the **STEAM ENGINE** is **STUART'S ANECDOTES**. Numerous fine little plates show the different engines from **HERO** to **BRUNEL** (including Trevithick and Brown), **PORTRAITS** of Jonathan Hulls, Brindley, Smeaton, Watt, Boulton, Hornblower, Cartwright, Fulton, Dodd, M. I. Brunel, Sam. Brown, and Jacob Perkins, and numerous facsimile autographs. Errors he may have made but the charm of Stuart's descriptions is absolutely undeniable.

Stuart, Robt. Hist. and Descr. Anecdotes of Steam Engines, and of their Inventors. 650pp. 2 vols, 18° £2 2/ 1829

Pambour first gives Formulæ for Powers of all Engines.

1839 274b **ACCORDING** to PAMBOUR Engines in 1839 must have been to a large extent built by rule of thumb. He distinctly says that until he published his scientific explanations **LOCOMOTIVES WERE NEVER SURE TO ACCOMPLISH ANY GIVEN EFFECT**, unless precisely modelled after one already tried. They were sometimes made **TOO STRONG** and then they were wasteful. At other times **TOO WEAK**, when the drivers loaded the safety valves and **AWFUL EXPLOSIONS WERE THE RESULT**. The formulæ he had previously worked out for locomotives (see 1836

edition *infra*) he had here EXTENDED to ALL STEAM ENGINES
Pambour (Comte de) Theory of the Steam Engine.
 350 pp. d8° 10/6 1839

REID ON ARAGO.

1840 274c M. ARAGO, having published the first separate Memoir of WATT, Mr. REID, at the instance of the GLASGOW PHILOSOPHICAL SOCIETY, took exception to the small credit given to WATT, and ALSO to SAVERY and NEWCOMEN
Reid, H. Remarks on Arago's Historical Eloge of Jas. Watt. 68 pp. d8° 21/ Glasgow, 1840

RUSSELL.

1841 274d DR. ROBISON wrote the STEAM ENGINE article for the 6th Ed. of the *Ency. Brit.* and Mr. Russell for the 7th. The pages below are extracted from the latter, and the preface gives Watt's sketch of Robison, and also Robison's sketch of Watt.
Russell, J. S. Treat. on the Steam Engine. 331 pp. + 12 pp. and plates. 8° 7/6 1841

COMPOUND ENGINES.

1878 274e BELOW is a prize essay on the relative merits of simple and compound engines for battleships.
McDougall, N. Simp. and Comp. Engines. 87 pp. and plates. 3/ 1875

Locomotive Engines.

OLIVER EVANS.

1821 275 ACCORDING to Galloway (or Luke Hebert) Oliver Evans was THE INVENTOR of LOCOMOTIVES and one ran in the streets of PHILADELPHIA in 1800. The translation into French of his *Manual* includes a biography and his famous letter to the Lancaster Turnpike Road Company.
Doolittle's translation of Oliver Evans Manuel de L'Ingenieur Mécanicien Constructeur de Machines à vapeur. 222pp. and plates, 8° 21/ 1821

PARTINGTON.

1822 276 WHEN PARTINGTON wrote STEAM NAVIGATION was the only means of Steam Locomotion in good credit and if he says but little of the coming application we see here the first reception of it. "Land" Locomotives then were known by the earliest attempts of Trevithick and Evans, Brunton's Traveller was as important as any and Chapman's failure received more mention than Stephenson. He speaks of mechanical locomotion as of very early date and puts Paris as the birthplace of steam locomotion. Steam Coaches 'a poor idea' he says, have recently been revived in Ireland.
Partington, C. P. Hist. and Decr. of the Steam Engine (with criticism on Patents, Bibliography, Plates, etc.) 187 x 90pp. 10/6 1822

STUART.

1824 277 MR. Stuart set himself out to write the general history of improvement of the Steam Engine. In the course of it he describes and illustrates TREVITHICK'S LOCOMOTIVE;

STEPHENSON'S BRUNTON'S and CHAPMAN'S Patents are just mentioned and he wound up with high hopes of Jacob Perkins. Poor Blenkinsopp was not even referred to but as the author estimated from £1500 to £2000 as the cost of getting full information (p. 202) the omission may have arisen from that.

Stuart, Robt. Descriptive History of the Steam Engine. 228pp. d8° 1st or 2nd ed. (both alike) 10/ 1824
— The third edition (also the same). 228pp. d8° 10/ 1825

Stuart, Davy and Clarke.

1824 278 **W**ITH another volume of Stuart's History is bound up Sir Humphrey Davy's illustrated TREATISE ON THE SAFETY LAMP (145 pp., 1818) and DR. CLARKE on the GAS BLOW PIPE (109 pp.) 1819.

Stuart's History, with the treatises of Davy and Clarke. 3 vols in 1. d8° hf. bnd. £2 2/

SYLVESTER.

1825 279 **W**HEN the LIVERPOOL DEPUTATION went to see STEPHENSON'S LOCOMOTIVES they took Sylvester "an ingenious mechanic" with them. Below is his Report. It formed one of the publications reviewed in the famous *Quarterly Review* Article. [Mr. JOHN SYLVESTER also supported Stephenson. *Vide* Biog. in *Trans. of Civil Engineers (infra)*].

Sylvester, Chas. Report on Railways. 39 pp. 8°
£2 2/ 1825

Mr. ADAMSON.

1826 280 **M**R. JAMES ADAMSON, of Cupar, Fife, contributed a clever paper to the Edinb. New Philosophical Journal in April, 1826, in which he says:—EACH ENGINE ought to be made for ONE DETERMINED VELOCITY . . . No engine yet in use has been intended to travel over SIX MILES an hour. The HIGHEST VELOCITY I have witnessed was TWELVE MILES an hour. Locomotives will be far more likely to be unable to get up enough steam than to explode from too much. Not enough heating surface but there are known means of getting more. Stephenson's engines successful. [There is another paper by this writer in a rare edition of LONGRIDGE'S REMARKS, pub. 1827.]

Edinb. New Philos. Journal, April—Oct., 1826. 8°
half calf. Nice Copy. 10/ LONGRIDGE'S REMARKS, 1st ed. 87 pp. 8° 63/ 1827

PARTINGTON.

1826 281 **P**ARTINGTON'S Course of Lectures (with special descriptions of Brown's Gas Engine, Perkins' Engine, and Jonathan Hull's Pamphlet. See under Steam Navigation.

GALLOWAY.

1827 282 **G**ALLOWAY claimed GREATER ACCURACY than Stuart; he described and illustrated Brown's Gas Vacuum Engine (then attracting great attention), BLENKINSOPP'S, BRUNTON'S, TREVITHICKS', EVANS', and STEPHENSON'S Locos., also PERKINS and CONGREVE'S Engines and JESSOP'S New Piston. He spoke of GEORGE STEPHENSON'S exertions with locomotives but also of their bad local reputation, that they were not to be used on

the Newcastle and Carlisle Railway, and that a principal objection to them was inability to surmount the slightest ascent.

Galloway, E. History of the Steam Engine. 219 pp.
d8° (1st and 2nd ed. both alike) 10/ 1827 or 28

STUART IN FRENCH.

1827 283 STUART being very popular his 3rd edition was translated into French, but with omissions

"de quelques machines anciennes qui sont mises en mouvement par l'air echauffe."

Some of Stuart's points being "obscure" other authorities were sought but

"malgre tous nos efforts, nous n'avons pu nous procurer d'autres details,"

thus proving Stuart not only popular but strictly original.

Stuart, R. Histoire descriptive de la Machine a Vapeur. 382 pp. and plates, p8° boards. 15/ Paris, 1827

Perkins, Brown, and Gurney.

1828 284 GURNEY'S STEAM CARRIAGE is illustrated and described and the Engines of PERKINS who had "*used steam of greater elastic force than any one had ever dared to do before,*" and of BROWN "*the first person that matured a machine for obtaining power and motion by the combustion of hydrogen gas,*" are fully criticised by a Royal Institution Professor in the work below:—

Arcana of Science and Art, p8° 5/ 1828

Lardner. Second Edition.

1828 285 In the 2nd edition of his work on the Steam Engine Dr. Lardner devoted 13 pages to High Pressure Engines, starting with Leupold and Trevithick, and giving 5½ pp. to the wonderful PERKINS. He quotes Partington as to the local astonishment and fear caused by the first American Steam Boat.

Lardner, Dr. Pop. Lectures on the Steam Engine, 164 pp. and plates. p8° 10/6 1828

Lardner. American Edition.

1828 286 PROF. Renwick in adopting Lardner's work for Americans found it advisable to say more about HIGH PRESSURE ENGINES and LOCOMOTIVES. He stated that long voyages could never be accomplished by Steam because of the great amount of fuel necessary. For railways Renwick liked stationary power; said that rack rail locomotives had been successful, but that he PREFERRED ROLLERS TO WHEELS.

Renwick's Edition of Lardner, 171 pp. p8° 21/ New York, 1828

LIVERPOOL CONTEST.

1830 287 *The Arcana of Science* in 1830 and 1831 gave a description of this Contest or "GRAND RACE for £500," with illustrations of the "ROCKET," "NOVELTY," and "SANS PAREIL," Gurney's Carriage, Extracts from Walker and Rastrick's Report, from the *Scotsman* articles, and from Tredgold's list of railways; Liv. and Manch. Ry., view of Braithwaite's WILLIAM IV., note on Fordham's Air Engines, and on railroad "SAILING" in U.S.A.

Arcana of Science. 2 vols, p8° cloth. 10/ 1830-1

Stuart. Second Edition.

1831 288 A SUPPLEMENT continued the subject down to 1829 and

mentioned JAMES' annular tube boiler, BRUNEL'S expanding gas engine, BROWN'S explosive gas engine, PERKINS' safety valves, but the LIVERPOOL CONTEST was not mentioned. There is the fine portrait of JAMES WATT.

Stuart's Desc. Hist. of the Steam Engine. 249 pp. d8° 10/ 1831

ALDERSON.

1834 289 Mr. Alderson described and illustrated Trevithick, and spoke of the "*Steam Elephants*" of Blenkinsopp, recorded failure of Perkins' plan and of Americans who tried to out-Herod Herod, illustrated Hancock's "*SUN*" and sections of GURNEY'S Carriages, described some Stephenson locos. illustrated THE NORTHUMBRIAN, and like many people at this time approved of Steam Coaches as well as railway locomotives.

Alderson, M. A. Essay on Steam. 124 pp. d8° 10/6 1834

The First Work on Locomotives Alone.

1836 290 COMTE DE PAMBOUR published his first edition on estimating the powers of LOCOMOTIVES (in French) in 1835, and he spoke of NICHOLAS WOOD as being out of date not having heard of the latter's second edition of that year. Pambour was the FIRST MAN however to DEVOTE A WORK SPECIALLY to the LOCOMOTIVE. He remarks on STEAM PIPES that between two engines alike, in other respects, THAT ONE WILL HAVE THE ADVANTAGE WHOSE STEAM PIPES ARE THE LARGEST, but adds when the DIAMETER IS BIG ENOUGH for the PASSAGE of ALL THE STEAM the BOILER CAN GENERATE (at the biggest speed required) IT IS USELESS TO INCREASE IT. At which Herapath remarked, "Yes! You can get more safety and economy. Use the throttling valve." (Vide Ry. Mag. vol II., p. 3.)

Pambour (Chevalier de) Prac. Treatise on Locomotive Engines upon Railways. 365 pp. and plates, d8° 7/6 1836

Renwick's Third Edition of Lardner.

1836 291 IN his edition of 1836 Dr. Renwick had of course to withdraw many of the assertions in his first American edition, and he here describes the Liverpool Contest, gives Dr. Lardner's famous "simple rules" and adds his own notes.

Renwick's 3rd Edition from the 5th Edition of Lardner on the Steam Engine. 324 pp. d8° 15/ Phil., 1836

Hebert's Edition of Galloway.

1836 292 IN the work below Mr. HEBERT brought down GALLOWAY'S work to date in an "Appendix" bigger than the original work. He described and illustrated the CONTEST, and its Locos., including even BRANDRETH'S CYCLOPEDE, a would-be competitor, worked by a horse, Perkins' wonderful engines, numerous steam coaches, and gave many items touching the railways.

Galloway. Hist. and Progress of the Steam Engine. With Appendix by Hebert, 863 pp. d8° 10/6 1836

Lardner's Fifth Edition.

1836 293 JEAFFRESON in his *Life of Robert Stephenson* tells the tale

of Dr. Lardner and his "simple rules" by which parliamentary committees and others might be guided in forming an estimate of a proposed road, how these rules grew out of date, but got continually quoted against him to the infinite amusement of the parliamentary bar, and amidst the suppressed titters of *practical* engineers at the discomfiture of the man of theory. The Simple Rules or "Plain Rules" as he called them appear in the edition below, together with a capital critical chapter on the CONTEST, and railway matters generally, another on Steam Coaches, etc., etc.

Lardner, D. The Steam Engine familiarly explained and illustrated. 397 pp. p8° 10/6. 1836

Liverpool and Manchester Locos.

1836 293a THIS is Mr. Dixon's full detailed list, not only including the particulars given in Mr. STRETTON's little work (p. 31) (the Nos. in which correspond as far as 36) but also dimensions of Boiler, Tubes, Weight, etc. The Nos. go down to 44 and include "THE THUNDERER" of 1836. "THE ROCKET" stroke is given as 18. Nos. 3, 7, 15, 17, 20, 25 are marked "SOLD," 5, 6, and 16 "BROKEN UP," and 8 and 10 "DONE WITH." Stephenson's "WARRINGTON," "NEWTON," and "ACHILLES" are also numbered 1, 2, 3.

Mr. Dixon's } List of { Lon. & Man. Locomotives.
MS. } 47 { Sheet abt. 3ft. x 2 £2 2/ 1836

REID.

1838 294 IN Hugo Reid's little popular work on the Steam Engine there is an illustration of the 11 inch, bell cranked, vertical cylinder locomotive "EXPERIMENT," and a note that $\frac{1}{3}$ lb. coke per mile is now required and that tubes are generally 90 $1\frac{1}{2}$ inch. Mentions Farey's good opinion of STEAM CARRIAGES. He gives a very clear account of Engines generally and Steam Vessels, and brief but clear accounts of Ry. Locos., Steam Coaches, and Rotary Engines.

Hugo Reid. Pop. descrip. of the Steam Engine. With woodcuts 10/6. 1838

Tredgold on the Steam Engine.

1838 295 OF the three LOCOMOTIVES illustrated and described here (among numerous other engines for steam vessels, etc.) is a curious old loco. of pre-Contest days having two (vertical) cylinders and fire places and a beam working cranks attached to the spokes, and in which for draught the fire places had registers and the chimney top two apertures. The frame rested on four spiral springs in boxes, and both steam and smoke went into the same chimney. The drawing was by Tredgold himself. Of date five years after the contest and Tredgold's death comes ROBERT STEPHENSON'S 12-inch cyl. loco. for the little "Stanhope and Tyne" line. There are five plates showing its elevation, section, its safety valve, cylinders, etc., with full descriptions. Then come the plates, and full account of Stephenson's loco. built for Cubitt in 1836.

Tredgold on the Steam Engine. Edit. by Woolhouse, 2 vols, thick 4° £2 2/ 1838

295a Another Copy. With the text in 4° and the plates in the improved folio style. 2 vols, 4° and fol. £2 10/ 1838-4

ARMSTRONG'S OPINIONS.

1839 296 MR. Armstrong (after an experience of locos. since 1851)

here asserts that the cause of the greatest difficulty which railway engineers have yet had to contend with is WANT OF SUFFICIENT STEAM ROOM. That is partly why the locomotive power has cost the LIV. and MANCHESTER Ry. from £30,000 to £40,000 per annum. But he says that the invention of their treasurer Mr. BOOTH has brought locomotives to such perfection that they are perhaps INCAPABLE of FURTHER IMPROVEMENT. **Armstrong, R. Essay on the Boilers of Steam Engines.** Incl. observations on railway and other locomotives, etc. 264 pp. d8° 10/6 1839

PAMBOUR.

1839 296a **VIDE** "Various Papers" under STEAM NAVIGATION. 31

Adcock's Rules on H.P., Etc.

1839 297 "11¼ gallons of water," says Mr. Adcock, "must be evaporated every hour for each horse power" (p. 68). When the steam is generated at low pressure all the caloric above 220° will enter the boiler and into the composition of the steam. But when at high pressure the extra caloric will, by the same law, pass through the flues of the chimney and be lost." **Adcock, H. Rules and Data for the Steam Engine,** Stationary, and Locomotive. 88 pp. p8° 10/6 1839

The Greenwich Railway.

1839 299 THE OLD GREENWICH RAILWAY illustrations from the work called *Graphic Illustrations* appeared later on in *The Beauties and Wonders of Nature and Science*, edited by "Linney Gilbert, A.M., assisted by his literary friends." This contains the OLD GREENWICH ENGINE, a birds-eye view of GREENWICH RAILWAY, and also a view of the "NORTHUMBRIAN," views of the old FIRST, SECOND, and THIRD Class Trains, of some houses under Deptford Railway Arches, notes on railways, all referring to 1838 or 1839, and other matters. **Beauties and Wonders.** d8° 10/6 [circa 1839]

RENWICK.

1839 300 A WELL written, nicely printed, and lucid account of the Steam Engine, including chapters on STEAM NAVIGATION urging American v. English claims (with a reminder of the antiquity of wheel vessels), remarks on LOCOMOTIVES which he says can drag anything less than 32 times their own weight, describes and illustrates one of DUNHAM'S LOCOS. (like the Lickey Engines but with cylinders inside the frames) as typical of the best "Americans," and urges EVANS' claims [reasonably I think] before ROBISON'S. States also that "BALTIMORE and OHIO" Ry. was co-eval with the "Man. and L." and that American Locos. have been exported. **Renwick, Jas. Treatise on the Steam Engine.** 327 pp. and plates. d8° 25/ N.Y. 1839

Pambour on Locos. Second Edition.

1840 301 IN his second edition the Author gives the results of his further experiments on the resistance of trains and also the means of ascertaining the velocity, load, expansion, and counterweight which produce the maximum useful effect. He strongly objects to what Mr. WOOLHOUSE in his edition of "TREDGOLD" gives as an analysis of his theory. Of course he discussed the resistance of the air and wound up with certain tables.

Whether these tables proved (as Herapath did) that the air alone would prevent trains going at 60 miles an hour I am unable to say.

Pambour. Prac. Treat. on Locomotive Engines.
2nd edition. 583 pp., 5 plates. 10/6 1840

Pambour. French Text.

1840 302 **BELOW** is a copy of the illustrious Pambour's second edition on Locomotives in the original French.

Pambour, Comte. Traité . . . des Machines Locomotives. Deuxième éd. 660 pp. and plates. 18° 10/6 Paris, 1840

LARDNER.

1840 303 **DR. LARDNER** though he did make some mistakes in early days was unquestionably a lucid and a brilliant writer and below he gives twenty pages on the **LIFE of WATT** bristling with interest, one hundred pages about the **EARLY LOCOMOTIVES** and the **CONTEST**, twenty pages on the **STEAM CARRIAGES**, and two fine chapters on **STEAMSHIPS**; the whole accurately and artistically illustrated, and printed in the best style of Spottiswoode.

Lardner, D. The Steam Engine. 535 pp. Illustrated. 18° cloth. 10/6 1840

MANAGEMENT.

1841 304 **UNDER** an amusing review on p. 305, of the *Railway Monthly Journal*, in true **LECOUNT** style, a very neat little **GUIDE** to the **MANAGEMENT** of a **LOCOMOTIVE**, by Mr. Gregory is spoken highly of. **THE AUTHOR WAS ENGINEER** on the old **CROYDON** line, whose officers the review blamed for holding a "**HUMBUG CONFERENCE**" instead of attending to such matters as were here dealt with. It was the first work of the sort issued.

Gregory, C. H. Rules for the Management of a Locomotive Engine. 48 pp. 12° 10/6 1841

HOBLYN.

1842 305 **IN** cleverly chosen sections we get here an elem. account of the Steam Engine, dealing with (1) Principles (2) the Engine up to **SMEATON** (3) Era of **WATT** (when atmospheric gave way to modern engines) (4) the principle of **EXPANSION** (5) Engine dissected and parts explained (6) Mechanical power of Steam (7) **LOCOMOTIVES** (8) Steam Navigation. A clear, attractive, little work.

Hoblyn. Man. of Steam Engines. 293 pp., 18°. 10/6 1842

LOCO. DESCRIBED.

1843 306 **THE** large plates and descriptions below give a good popular account of the working of a six-wheeled, uncoupled, inside-cylinder, loco. with a domed fire-box casing, inc. elevation, vert. section, end elev. section of ditto, and plan. **Basire, Jas. junior. Locomotive Engine.** Illust. on Stone. Folio, wrappers. 10/ 1843

DUNHAM'S LOCO.

1845 307 **THE PRAC. MECH. and Eng. Mag. Vol. IV.** contains an article which, after remarking that **BALDWIN** was first success. loco. maker in U.S.A. and **NORRIS** the most

celebrated maker, gives (p. 103) desc. and view of Dunham's (New York) Locos. with a new mode of strengthening cranked axles. Says instead of HIGHER WHEELS rys. are adopting the EXPANSIVE PRINCIPLE to locos. It saves 35% fuel. The steam (35 to 60 pressure) is cut off at $\frac{2}{3}$ rds of stroke, and acts only by expansion for the other $\frac{1}{3}$ rd, Robertson's Steam Brake, and American Bogie Carriages, are also spoken of and the latter illustrated, and WM. STEWART writes to Editor to say he made a loco in 1814 for the Parkend Colliery and ran it on the LYDNEY RAILWAY. [I can find no other refce. to this ancient loco.]

Prac. Mechanic. Vol. IV. 10/6 1845

JOHN CURR.

- 1847 308 A remarkable book by a remarkable man is RAILWAY LOCOMOTION by JOHN CURR of "New South Wales." He has considerable contempt for the great body of engineers who "confessedly did not know in 1844 THE PROPER FORCE REQUIRED TO PULL A GIVEN TRAIN WEIGHT UP A GIVEN GRADIENT at a GIVEN SPEED." And here he shows them. Further on "RAILWAY TRANSIT, he says, can be effected CHEAPER at a HIGH SPEED THAN at a LOW ONE," and finally he winds up with a MANIFESTO *To the British Nation* in which he remarks that his father was the JOHN CURR OF SHEFFIELD WHO INVENTED CAST IRON RAILS, the populace there being so angered by their use that they tore them up, and John Curr Senior had to take refuge in a wood for three days and nights!

Curr, John. Railway Locomotion and Steam Navigation, their principles and practice. 181 pp. d8° cloth. 21/ 1847

A TARTAR.

- 1847 309 WHOEVER "*Veritas Vincit*" was he must have been considered something of a Tartar. He dates from BIRMINGHAM and possibly was Peter Lecount. He seems to have made himself a stinging critic on all companies' locomotive managers and to have "given them a character" in the press. Mr. ALLPORT did not get off, he was compared to honest JOHN DIXON, Mr. TREVITHICK, of Crewe, was accused of glaring ignorance before Mr. LOCKE, and it seems that the locomotive engineer who came off scatheless after *Veritas Vincit* got his eye upon him was a lucky fellow. "A pretty lot of them" come under review here.

Letters of "*Veritas Vincit*." 232 pp. d8°, cl. 10/6 1847

TEMPLETON.

- 1848 310 TEMPLETON gives a fine plate of Crampton's "ultimatum of the narrow gauge," the locomotive LIVERPOOL, and also Bury's loco. ALBERT, sections, etc., with a capital popular account of locos., data of principal rys., duties of engine drivers, etc. He says the latter should be men of strong nerve, who, when accidents happen in desolate places, can satisfy passengers by active endeavours and intelligent conversation.

Templeton, Wm. The Locomotive Engine popularly explained. 106 pp. p8° 10/6 1848

THE "BRIGHTON" RULES.

- 1848 311a THE little work below shows the Brighton Co.'s Rules for Enginemen and others as issued 1848. It belonged to

J. Ward who is, I believe, still able to "spin a yarn" about the old days.

London and Brighton Regulations. 41 pp., 12°. *lp. cl.*
7/6 1848

EXPANSIVE ENGINES.

- 1849 312 MR. HODGE in explaining the properties and advantages of Expansive Engines incidentally illustrates a LOCOMOTIVE made by SHARP for the SHEFF. and MANCH. RY." in which "the expansion is effected by the slide valve alone, and not by a separate expansion valve."

Hodge, P. R. *Analytical Principles of the Expansive Steam Engine.* 172 pp. and plates. 4° 10/ 1849

AMERICAN.

- 1850 313 THERE are four large plates with full descriptions of the AMERICAN LOCOMOTIVE "CROTON," built at the Lowell shops for the HUDSON RIVER RAILROAD, in this "Collection." 'C' has 12½-inch cylinders, is a double driver, and one of the best at date for short local trains.

Amer. Engineering Soc. Collection of Drawings of Amer. Machinery. Large folio. Rare. 30/ 1850

Tredgold. Locomotives.

- 1850 314 "TREDGOLD is dead. Long live Tredgold!" He never saw a respectable locomotive; and yet one of the best books on locomotives in 1850 bore his name, and formed a separate portion of his work on the Steam Engine. It consisted however of papers by different engineers, ten on locomotives and management alone but with addition of three on stationary engines. The former papers were as follows, the locos. fully described and illust. by elevations, sections, etc. (1) Sewell on Practical Management with plates illustrating the IRON DUKE (1847) and PYRAMON (G.W.R.) locos; (2) SAMUEL'S EXPRESS STEAM CARRIAGE; (3) ARMSTRONG on the Boiler; (4) BARLOW on Sharpe's OUTSIDE CYLINDER TANK ENGINE for the Manch. and Birm (1847); (5) WOODS on Fuel and Evaporation; (6) Stephenson's famous description of his loco. repeated; (7) CALEDONIAN PASSENGER ENGINES (15-in. cyl. diam. 6-ft. whls. 20-in stroke); (8) Bury's THE WREKIN (similar in all principal parts to his LIVERPOOL of 1830) with cranked axles, horizontal cylinders, but six wheels not four; (9) Hawthorn's First Class Express loco. PLEWS; and lastly (10) Crampton's famous loco. LIVERPOOL (the "ultimatum for the narrow gauge.")

Tredgold on the Steam Engine, Locomotive and Stationary Engines [Volume complete in itself]. About 250 pp. and 58 plates. 4° 25/ 1850

- 1850 315 ANOTHER COPY, with the first eight papers only. 15/

BOURNE.

- 1851 316 AMONG the following pages TWO LOCOMOTIVES of 1851 are described and illustrated with plates and woodcuts; one a BURY'S 14-inch coupled four wheeler with 92 2½" × 10½-ft. tubes, the other a STEPHENSON'S 15-inch six wheeler with link motion and 150 1⅝" × 15-lt. tubes. The whole working of the locomotive is explained, and four wheelers are defended. He speaks of the relative merits of brass and iron boiler tubes, and of locos. being now in a transition state owing to the establishment of expresses.

Bourne, John. *Treatise on Steam Engines.* With numerous woodcuts and plates. 4° 258 pp. 15/ 1851

Reid. Third Edition.

- 1851** 317 IN Reid's third edition of 1851 one of BURY'S LONDON and BIRM. Locos. is substituted for the old **Experiment**. Puts top speed at 60 miles, and average express speed 30 miles an hour, and contains 30 pp. on Arago's statement in his life of WATT as to Inventor of steam engines.

Reid, Hugo. **The Steam Engine**. Illus. 12° 7/6 1851

Norris of Philadelphia.

- 1852** 318 IT was *William* NORRIS who made the American Locomotives for the **LICKEY INCLINE**. SEPTIMUS NORRIS here states that for twelve years he has been engaged with his brother, who, he says, built the first loco. in the States, and was the first engineer to surmount the Schuylkill Incline (1 in 12) "He and I have made 530 locos. 17 of which run on the BIRM. and GLOUCESTER RY. (England)." The pages below are for mechanics of all degrees and give many outside items on Rys. such for instance as the Nos. of Locos. and Carriages, etc., on 46 British Lines. He shows two American locos. of 1851.

Norris's **Handbook for Locomotive Engineers**. 300 pp. 8° 15/ Philadelphia, 1852

CLARK.

- 1855** 319 THE work below is the best I have seen on **LOCOMOTIVE TO**
1860 **ENGINES**. It contains no less than **THIRTY-SEVEN FULL PAGE PLATES** showing them, besides other plates on the **CARRIAGES, WAGGONS, TURNTABLES, and diagram plates of VALVE and LINK MOTION and CYLINDERS**, while there are numerous woodcuts, including a very fine plate showing 27 American locos. from 1837 to 1859. The text is by no means mere description of the splendid plates, but is arranged under an entirely original classification, and is full of items of historic interest, such as the invention of **TANK LOCOS.** by Dr. CHURCH; of **BOGIE LOCOMOTIVES** by ROBERT STEPHENSON, the origin of the term bogie engine, and so on. The first volume gives text, the second plates, and the third both text and plates as a supplement five years later. Among the locos. described are STEPHENSON'S Tank L., his S.E.R. Pass. L., BRUNEL'S Tank L. (for Vale of Meath), HAWKSHAW'S Pass. and Gds. Ls. for Lancas. and Yorks., Locos. for Egypt, BEYER'S Tank Loco. for Gt. N. of Scot., ALLAN'S Gds. Loco. for Scot. Central, SINCLAIR'S Gds. for E. Counts., FAIRBAIRN'S Vulcan, 1850, KITSON'S Leeds and Thirsk No. 8, GOOCH'S Pass. L. SNAKE, and many others of interest.

Clark, D. K. **Railway Machinery**. The two vols of 1855 and the extra vol of 1860 (by Clark and Colburn). 3 vols, folio, £3 3/ 1855 to 1860

INDICATOR.

- 1875** 321 "WHAT the Stethoscope is to the Physician the Indicator is to the skilful Engineer, revealing the secret working of the inner system and detecting minute derangements in parts obscurely situate." So say Messrs. Hopkinson on the 7th edn. of the work below.

Hopkinson and Co. **Engineers' Prac. Guide**. Working of the Steam Engine Explained by the Indicator. 345pp. and append. 8° 3/ (pub 12/) 1875

See also BERGIN on Atmospheric System (p. 84)

The Vacuum Brake and Vacuum Smith.

N.D. 322 "WHERE is Mr. Smith, patentee of the vacuum brake? Down yonder; ask for Vacuum Smith, that's his Christian name, only it ought to be Vacuum to agree with Smith." For further particulars see Williams' *Our Iron Roads*, p. 445, and the book below.

Vacuum Brake. 8 folding plates and descriptions. 5/
N.D.

THE GREAT NORTHERN ROUTES.

1855 322A Mr. J. Ward transferred his services to the G.N.R. about 1855. He has oiled his rules and the affixed gradient table as well as his locos. The signals of other lines are described and illustrated.

Great Northern Rules for Enginemen, etc. 68pp. 12°
1855

LOCOMOTIVE DRIVING.

1881 323

"The steam is up; the engine bright as gold;
The 'Fire King' echoes back the guards shrill cry;
The roaring vapour shrieks out fierce and bold,
A moment—and 'like lightning on we fly."

So begins Mr. Reynolds, and then goes on to say what may or does happen on a locomotive.

Reynolds (M.) Engine Driving Life. 190pp. p8° 3/
1881

AMERICAN LOCO.

1869 323A BELOW is a large coloured drawing showing a Rogers' New Jersey Locomotive.

Drawing of N. J. Loco. (usual size) 5/
1869

HISTORY OF THE LOCOMOTIVE.

1892 324 Mr. Stretton has just written a splendid little book to illustrate the GRADUAL DEVELOPMENT of LOCOMOTIVE ENGINES from 1803 to 1892. It sparkles with anecdotes, and over sixty locomotives are represented in the woodcuts. 81 miles an hour, says the author, was done in 1853, 80 is at present, however, the maximum pace. I see Mr. Stretton (p. 69) in speaking of the Lickey Engines says, "it was a mistake to assume" that they could not be made in England. But did not the English builders refuse to supply?

Stretton (C. E.) The Locomotive Engine. 154pp. p8°
3/6 1892

Dixon Correspondence.

"[The prices of any items not marked will be given upon application.]

The Royal George.

1827 324a BELOW is Mr. DIXON'S coloured drawing of the famous old engine with which HACKWORTH is said to have made feasible the retention of locos. on the "S. and D." A note below says it was sold to Hartlepool, and gives other particulars mentioned by Mr. Stretton on his p. 21.

Coloured (Engineer's) Drawing of "The Royal George." (about 3-ft. by 2) 30/
1827

Dixon and Earle on Tubes.

"MR. HARDMAN EARLE, a Liverpool Merchant, was a very active spirit in the direction of the early Liverpool lines. He took a lively interest in the construction and improvement of engines."—P.O. DIRECTORY, 1848.

1832 324b COPY of Letter John Dixon (Manchester) to H. Earle

(L'pool.) on the superiority of light tubes over heavy ones, etc. Mr. Dixon says that JUPITER was the first loco. to get an entirely new set of tubes in her (12 lbs. instead of 6 lbs.). It took 600 lbs. copper but several tubes have burst and the extra weight has been useless. Heavy tubes cost £60 extra, add 1000 lbs. to the weight and do no good, and I consider they injure the boiler ends. Holograph letter from H. EARLE to J. DIXON, dated 23rd May, 1832 (but apparently in reply to above). I was in favour of heavy tubes but am changing my mind and you add confirm. to my op. The PLANET first shook my faith in heavy tubes. She has light ones (6½ lbs.) (some I find now shrunk to 4 lbs.) but she has done double what the JUPITER has. I consider she is better because she has a larger boiler, more tubes, and a larger fire-box and blast pipe. (The injury of tubes from intensity of blast is then referred to and the instantaneous conversion of water touching tubes into steam). We must have greater space between tubes; or a larger boiler, more tubes, and less blast. I prefer the latter. Let us transfer PHOENIX into the PLANET class, put copper ends to her boiler, copper under her fire-box, and 140 tubes, one half copper, rest iron with copper ends. [3½ pp. closely written.]

1832

Ed. Dixon on the Man. and Liv. Locos.

1833 324c OBSERVATIONS (by Ed. Dixon) on Locomotive Engines and their performances on the Liv. and Manch. Ry. Sept. 1833. A very lucid description of the L. & M. locos. most of which have 11-in. cyl., 16-in. stroke, plac. horiz. under boiler, wheels 5-ft., press. of steam. 50-lbs. Mentions VICTORY 'SAMSON,' the latter a large loco. for assisting at inc. planes. Says halving the wheel diameter means halving the speed and doubling the possible load, puts 15 m. per hr. as ord. speed with a good load. If we increase the engine power we do not propor. inc. the friction. No calculations of working power will avail without evap. power. The best boiler is that which can most econ. evap. most water in prop. to size and wt. The recent astonishing performances of locos. due to gt. improvts. in boilers. Describes and illustrates the SATURN and refers to the JUPITER. (9 pp. folio.)

Drawings of Liv. and Man. Locos.

1836 324d The following refer to the Liverpool and Manchester Locomotives, and are of scale about 1½" to foot, and all dated 1836, and signed by G. MILLER: (a) The Meteor, showing side and front elevation (signed, September, 14, 1836). (b) Sections and Details of the Wheels of Vulcan, Star, Meteor, and Caledonian (signed, Oct. 15). (c) Details of Titan (signed, Aug. 20), on diff. scale. (d) Elevation of a Tender (signed, Oct. 4). (e) Elevation of Vulcan (Oct., 1836). (f) Details of Titan, showing tube orifices (Nov.). (g) Friction Roller Apparatus attached to Fire Fly, 1" to foot (Dec.). (h) Plan and Section of a Loco (Aug. 16, 1836). (i) Front Elevation and Section of a Loco, and Sections through Cylinder and Slide Case, dated Nov. [j] Brass Section Pipe, diff. scale, Dec., 36.
Ten Drawings of the L. and M. Locos. of 1836.
£2 10s

Mr. Buckle re Murdock and Hackworth.

1848 324e IN a copy of a letter from Wm. Buckle it is stated that in Murdock's engine the eduction of steam from the piston is led up the slide valve, which is a tube with side openings to allow the escape of the steam into the air, that there is no sign of a blast pipe, 'the invention of which, it has generally been admitted, belongs to Mr. Timothy Hackworth.'

Copy of Letter, 2½pp., 4°. Wm. Buckle to Rich. Roberts, Esq., dated 24 March, 1848.

Richard Roberts, re "Sanspareil."

1848 324f A long, chatty letter to Mr. Dixon from Richard Roberts, of the famous old firm of Sharp, Roberts, and Co., and maker of the "EXPERIMENT" for the L. and M. (1833), and many "Grand Junction" locos., refers to Mr. Garnett and family and Mr. J. E. Taylor, and to his own family. He has been ill, he says, dissolved partnership with the Sharps in 1843, and Messrs. Fothergill and Dobinson have now joined him in the Globe Works. He thinks from Mr. Dixon's letter that the SANSPAREIL had a blast pipe at the contest, and the ROCKET subsequently. He says that he heard some of the L. and M. mechanics say that George Stephenson made a visit in the night to the Sanspareil to see how the effect was produced. Then comes a question as to whether Mr. D. knew anything of a French pamphlet [presumably Senguin's] describing the multitubular boiler before Booth's invention. 'Mr. Benj. Hick, of Bolton, often spoke of it to me.' Gen. Pasley wants the information for his History of Ry. Locom. Then he asks why the prize was awarded to Robert and not to George Stephenson? and further 'You say the orifice of the blast pipe was gen. of copper, but were you not the first to find brass vastly superior for the tubes and pipes subject to . . . heated gases?'

Richard Robert's MS. Letter to John Dixon. 7pp. p8° Dated Manc., Feb. 7th, 1848.

Fierce Rivalry between the Companies.

1849 324g THE letter below gives a graphic description of the opposition of the Shrewsbury and Chester and Chester and Birkenhead Railway Cos. over some coach opposition ending in the barricading of the Chester Railway Station and even in the calling in of the military (!) Bell agrees with Mr. D. of monster engines and expansion that it is spending money to make a large engine to reduce to the power of a small one. In last number of *Herapath* is a new light engine the Cambridge. Its cost of working is 7½d. per mile. The average cost is now £14 per mile per week. The old L and M of 8 tons did good service as Pambour shows. Stephenson, Bidder, and Brunel are ruining railways with gauge expts. He then quotes the *Engineer and Arch. Jnl.*, Feb., 49, and mentions a proposed light passr. loco. of his own.

G. A. Bell's MS. Letter to J. Dixon. 6pp. 4°. Closely written. Dated Chester, 26 Nov., '49.

John Dixon and Light Locos.

1849 324h THE paper below is a copy of the letter to "*Herapath*," which appeared in that Journal, Dec. 8th, 1849 (p. 1231-2). In advocating lighter locomotives he puts minimum weight at 10 tons.

Copy of Paper contributed by John Dixon to "*Herapath*."

Cast-Iron Tyres.

1863 324i IN thanking Mr. John Dixon for a series of photos of old locos, Mr. Zerah Colburn, of *The Engineer*, says he concludes that they had cast-iron tyres, "chilled," and that they were slipped on without shrinkage, asks if they had a conical bearing. Speaks of two U.S.A. patents of 1840 and 1844, and says Slip tyres were sold for years at 4d. per lb. or £37 6s. 8d. per ton, plain castings.

Colburn's Letter to Dixon, dated July 10th, 1863.

Third Class Carriages.

1845 324] THE pages below show the dimensions, particulars of air and light, time on journey, whether doors are locked, etc., on 26 railways, to which are prefixed 19 full-page plates showing elevations, sections, etc., of the third class carriages approved of. On some lines only one door was available for each 50 passengers, and as glass was scarce a carriage was either of "open" or "horse box" shape. The "Y. & N. MIDLAND" were about the most repulsive looking, and the "MIDLAND" the best.

Commons' Return on 3rd Class Carriages. Folio. 21/ 27th June, 1845

Photographs of Locomotives and an Invitation.

(A Photographer who makes a speciality of Photographs of LOCOMOTIVES asks for orders. Of course any such shall be sent on. And we might mention here that any information as to photographs or drawings of EARLY locomotives whether for sale or only for record will be welcomed. So also as to the whereabouts of any curiosity relating to old railway days.)

Water Locomotion.

CANALS.

1803 325 to 333. CANALS HAVE PLAYED so important a part in connection with the Early HISTORY of RAILWAYS, that some old records of them may prove of some interest. I shall therefore briefly refer to a few, and taking them in order of date the first will be the HISTORY of INLAND NAVIGATION by J. Phillips: He was employed by the great Brindley, had seen the American and Continental systems, and his work of 598pp. gives a notice of almost every important canal. In 1805 Zach. ALLNUTT, of Henley-on-Thames, quaintly describes and criticises the river, and proposes to join it by canal to the Severn. He gives two coloured maps and 46 pages. In 1819 J. HASSELL wrote an historical and topographical description of a Tour of the famous Brindley's GRAND JUNCTION CANAL, illustrating with some first-class coloured plates a district with "an almost perpetual succession of variegated beauty." In 1827 N. W. CUNDY revived the idea of a SHIP CANAL between London and Portsmouth, and Sir John Rennie, supported by Mr. Baring (afterwards Lord Ashburton), surveyed for a waterway for 74 gun ships and the largest Indiamen. But £7,000,000, the estimate, frightened everyone. [The London Chatham Railway (same length) cost over £16,000,000.] In 1831, William [afterwards Sir William] FAIRBAIRN (one of the first builders of iron ships), wrote a little work on the use of STEAM on CANALS, and illustrated suitable steam boats. In 1832 Wm. [afterwards Sir Wm.] CUBITT (the maker of the South Eastern Railway and the Liverpool Landing Stage), briefly describes a plan for shortening the line of canal between London and Birmingham. In 1834 Henry E. FLYNN wrote on the question of a Dublin and Kingstown SHIP CANAL, criticising Mr. Wm. Cubitt's plan. In 1835 came the Act of Amalgamation, &c., of the "BIRMINGHAM CANAL NAVIGATIONS" (with map); also of 1850 comes a coloured map of the latter. And, lastly, in 1864 Col. Sir Proby CAUTLEY publishes for private circulation his reply to Gen. Sir Arthur Cotton on the Heads of the GANGES and JUMNA Canals.

(325) Phillips History of Canal Navigation. 8vo, 10/6, 1803; (326) Allnutt on the River Thames, 21/, 1805; (327) Hassell's Grand Junction Canal, 147pp., with fine coloured plates, 21/, 1819; (328) Cundy Ship Canal Lon-

don to Portsmouth, 58pp., maps, &c., d8°, 21/; 1827; (329) Wm. Fairbairn on *Steam Canal Navigation*, 93pp. and plates, 21/, d8°, 1831; (330) Cubitt on a *Canal from London to Birmingham*, 7pp. and map, 7/6, 1832; (331) Flynn on *Dublin and Kingstown Ship Canal*, 83pp., 10/6, 1834; (332) *Birmingham Steam Navigation Co.'s Act*, 158pp., fcp folio, 1835, with map and with FURTHER MAP of 1850, 10/6; (333) Cautley on the *Ganges Canal*, with maps, 104pp., 7/6, 1864. [See also PRIESTLEY, 1831. No. 380.]

Steam Navigation.

[Considering the important connection between RAILWAYS and STEAMBOATS, no apology will perhaps be needed for inserting here a few works relating to the latter.]

First Work.

1816 334 THE first separate publication devoted to a Steam boat was no doubt JONATHAN HULLS description of 1737: but as the *Comet* was not tried on the Clyde till 1812, BUCHANAN'S work below may claim to be THE FIRST SEPARATE BOOK DEALING WITH STEAM VESSELS GENERALLY. It is a wonderfully big book for the subject's age. Though a Glasgow publication it honours FULTON more than BELL, it deals with Steam Boats on BRITISH, IRISH, and AMERICAN RIVERS, gives account of VARIOUS PROPOSED MODES OF PROPULSION, and is a critic of STEAM BOAT BUILDING. There are seventeen plates. Buchanan, Robertson (C.E.) *Practical Treatise on Propelling Vessels by Steam*. 187 pp. 17 plates, d8° boards. £3 3/ Glasgow, 1816

Steam Navigation.

1822 335 As Partington is valuable for his reference to LOCOMOTIVES even more so is he with regard to STEAM VESSELS. After his descriptions of the value of STEAM ENGINES GENERALLY (then numbering 10,000) and of some of the most powerful in the world, he devotes *seventy-one pages* to STEAM NAVIGATION including the work of HULLS, DUQUET, JUOFFROY, FULTON, MILLER, SYMINGTON, and STANHOPE, LINNAKER, the *Thames and Clyde Boats*, and *American Steam Navigation*, and 18 pp. to the COMMONS SELECT COMMITTEE of 1817. He speaks of 400 tons as of great burden, and advocates for safety the use of a SUBSIDIARY ENGINE BOAT, speaks of the traffic on the Clyde and on the Adriatic, gives a list of the MISSISSIPPI STEAMBOATS, and says 100 ton boats cost £6000, Clyde Steamers £2000.

Partington, C. F. *Historical Account of the Steam Engine*. 90 pp. and plates. d8°, 10/6 1822

The First Margate Steamboats.

[1823] 336 THE FIRST ENGLISH Steamboats plied on the Thames to Margate, and in the reign of King George IV. Thomas Nicholls presented the public with 323 pages descriptive of the riverside. Reference is here made to the specially fine river boats between QUEBEC and MONTREAL as being the MOST PERFECT OF THEIR KIND.

Nicholls, T. *Steamboat Companion*. With map and views. 18° 21/ Circa 1823

The Largest Steamboats.

1824 337 A SUPPLEMENT to the Ency. Brit. contains Bell's and Symington's Statements as to Mr. Fulton's enquiries from

them and a fine little plate showing 15th century paddle boat, HULLS Steamboat at work, and the "CITY of GLASGOW," with a list of British Steam Boats—the "SOHO" being the largest in England or Europe, and Fulton's 'CHANCELLOR LIVINGSTONE' the largest in America or in the World. Compared with one of the latest 'liners' CAMPANIA, and giving the dimensions of the new boat below that of the old 'CHANCELLOR LIVINGSTONE,' we have:—

Spd 8½ m. p. h.	Crew 24.	Fulton (of 1823)	was 165 ft. lg.	520 tons burd.	Eng. 75 ho. pwr.
" 22 knots.	" 330.	620 "	" 18,000 "	displact. "	30,000 "

Supplement to the Encyclopædia Britannica. With article on Steam Navigation. 4 boards, 10/ 1824

A Fine Little Work on Steam Vessels.

- 1826 338** A BOOK INTERESTING ALIKE for its practical criticisms and an amusing variety of matter relating to Steam Vessels was one by Capt. WALDRON, R.N., ornamented with some PARTICULARLY FINE STEEL PLATES ON INDIA PAPER. It urged that STEAM NAVIGATION was not so dangerous as Sailing, and its pages and plates probably supplied the first hints as to avoiding many little difficulties. HERO, WORCESTER, SAVERY, KEMPEL, STANHOPE, NEWCOMEN, and WATT are noted. PERKINS *Safety Joints and Steam Gun*, and FRANKLINS *Duplex Generators* are fully described, as well as a SINGULAR AMERICAN IRON STEAMBOAT now building for the SUSQUEHANNA, and illustrates and describes THE SHANNON (London and Dublin Steam Marine Co.), old ships, rafts, life boats, accidents, Lighthouses, etc., etc. It refers, too, to loco-motive engines (*Blenkinsopps*) on rail-roads 'dragging several carriages carrying 8 to 12 persons, with luggage at 10 or 12 miles an hour without the slightest accident,' and also to GIBBS-SUSPENSION RAILWAY at Cheshurst (Herts.)

Waldron on Steam Vessels. With fine plates, 104 pp. d8° boards. £2 5/ 1826

Partington, with Hull's Pamphlet.

- 1826 339** THE little work below described BLINKINSOPP'S loco-motive, thought a 20 mile speed exceedingly improbable; fully explained Brown's Gas Engine (for propulsion of carriages by the expansion of carburetted hydrogen gas in the cylinders), Trevithick's loco, Perkin's Engine, spoke of the Clyde Vessels 'Comet' (3-horse power, the 1st), 'Elizabeth' (8-h.p.; 2nd), 1813, and 'The Clyde' (3rd), while 'The Soho' was the largest built [in Europe]. And as an Appendix appeared a copy of Jonathan Hull's rare Description and Draft of a Steam Vessel Apparatus.

Partington (C. P.) Course of Lectures on the Steam Engine. 92pp. and plates. p8° VERY RARE. 21/ 1826

Origin of Steam Boats.

- 1831 340** EFFINGHAM WILSON published (in 1831) a capital little 75-paged HISTORY of STEAM BOATS. Speaks of paddle wheels worked by men or horses, a model of a TEN GUN SHIP worked by an Engine to replace sails advertised March 27, 1761; and also (three months later) the *Speedwell* Yacht or River Machine, a model for working a ship in a calm; speaks of Watt, Miller, de Jouffroy, Stanhope, Symington, Oliver Evans. Then in 1807 STEAM NAVIGATION. Mr. BELL, of Glasgow (it says) took a model to Mr. FULTON, who got the engines of the FIRST STEAM BOAT EVER USED (on the Hudson River) from Boulton and Watt, of Birm. Gives Fulton's accounts of his *First Steamboat Voyage*, and acknowledges his being the first successful APPLIER of this power, records his poverty, and as also

that of Bell, the INVENTOR, details Bell's boats, and speaks of Denny's 'Rob Roy.' Also describes 'THE MARGERY,' the FIRST STEAMBOAT PLYING ON THE THAMES, and its immediate followers.

Account of the Origin of Steamboats. 75pp. 8° 30/
Wilson, 1831

Various Papers.

1834 341 THE following important papers are bound together in one quarto volume: MOSELEY on the Theory of Machines (1841); RENWICK on U.S.A. Steamboats (1839); Narrative of Invention of Steamboats (addressed to Parnell) 1834; Taylor and Miller's Expts. on S. Navig. (1834); Hall's Improvements (1837); Grahame on Inland Communication (1835); and Parkes on Steam Boilers and Steam Engines (1839), the latter containing a most interesting criticism of Pambour's Calculations.
Collection of Papers on Steamboats, &c. 4to, hf. cf.
RARE. 42/ 1834 to 1841

Hall's Improvements.

1835 342 THE boilers of Steam Vessels being much injured by deposits and incrustations, Mr. Hall brought out his patent described by Lardner (1836) to preserve the boilers from the sea and impure water, to save one-third of the fuel, &c.
Hall (S.) Pat. Improvements on Steam Engines.
21pp. two plates, 8° 10/6 1835

DR. LARDNER.

1837 343 ABOUT two years after Dr. LARDNER had asserted the IMPOSSIBILITY of ATLANTIC STEAM NAVIGATION, and the year before it was accomplished, the work below shows him strongly advocating steam from India. It appears that in July, 1834, a Select Committee of the House of Commons reported in favour of the *regular establishment of Steam Communication with INDIA* by the RED SEA, and of the testing of the Persian Gulf and Euphrates route. The latter only had been attended to, and Dr. Lardner, on behalf of the English Merchants and Natives of India, drew up the work below, addressed to Lord Melbourne, pleading for the Red Sea route, and compared it with the Euphrates line.
Lardner (D.) Steam Communication with India by the Red Sea. With maps. 123pp. 21/ 1837

Sailors and Steam Vessels.

1837 344 ONE CAN WELL UNDERSTAND that many difficulties had to be removed before Steam was fully appreciated by Sailors. A most interesting memento of the early days is seen in the work below by OTWAY, himself a Sailor, who found ENGINE MEN DESIROUS OF MAKING A MYSTERY OF THE ENGINE ROOM *with a view to maintain a mastery over the officers!* He, therefore, wrote this work in non-technical language for the information of his brother officers, and dedicated it to LORD JOHN HAY THE FIRST MAN WHO CONDUCTED WAR WITH STEAM VESSELS.
Otway, Robt. (Commander R.N.) Elem. Treatise on Steam Navigation. d8° 21/ Plymouth, 1837

The First Atlantic Steamer.

1838 345 WHETHER "THE SAVANNAH" or the "THE SIRIUS" was the FIRST STEAMER TO CROSS THE ATLANTIC appeared at any rate to be an open question in 1838 for I

have here a little book printed at Edinburgh for THOMSON & Co. giving maps and short descriptions of the BRITISH and IRISH PORTS, and dedicated to the *St. George Steam Packet Co.*, mentioning that to be able to say 'that their ship SIRIUS was the first Steamer which dared to cross the Atlantic is a proud boast and not less so the fact that their *British Queen* is LONGER BY 35 FEET THAN ANY VESSEL IN THE BRITISH NAVY.'

Steam Navigation of England, etc. 36 pp. *with maps.* 10/6 1838

A First Class Highland Steamer Guide.

1845 346 THE exceedingly well-written *Steamboat Guide* below to Scottish Highland Coast and Islands gives a special account of the renowned Iona (I—Colm—Kill). The work is evidence of the great skill devoted in early days to these "guides."
Dalrymple's Native Steamboat Companion. 218 pp. 18° 7/6 1845

JOHN CURR.

1847 347 MR. John Curr's work on Railway Locomotion dealt also with STEAM NAVIGATION. Speaking in 1847 he says that in 35 YEARS STEAMBOATS HAVE UNDERGONE TWO VARIATIONS. In 1814 the ENGINE COULD BE STOPPED OR SET ON AGAIN *instantly* (impossible with a great fly wheel). The SCREW PROPELLER was the other Variation. This he fights against. He also speaks of the revival of the EXPANSIVE PRINCIPLE, and calls this 'fanaticism,' and refers to the '*Great Britain*' as being 1500 nominal and 300 actual horse power. The principle, he says, was known to WATT and he did not use it.
Curr's Railway Locomotion and Steam Navigation. 181 pp. d8° 21/ 1847

First Lighthouse built on Screw Piles.

1848 348 WHEN IT BECAME NECESSARY in 1837 to have a fixed light on the MAPLIN SAND (one of the numerous Sandbanks at the THAMES mouth) Mr. MITCHELL's offer was accepted to lay its foundations on SCREW PILES, which, together with the LIGHTHOUSE are described in the paper below. In both the *Eddystone* and the *Bell Rock* SHEET PILING was used.
Redman and Manby on Mitchell's Submarine Foundations (esp. Screw Pile and Moorings) and an account of Maplin Sand Lighthouse. 61 pp. and plates. 8° 7/6 1848

History of Steam Navigation.

1848 349 WOODCROFT'S work on Steam Navigation is of unusual interest. It goes thoroughly into the History of the subject, gives beautiful tinted plates showing Symington's "CHARLOTTE DUNDAS" of 1803, Fulton's "NORTH RIVER" of 1807, and Henry Bell's "COMET" of 1812, other plates of Miller's Triple Vessel, Double Ships and Boats, Stockton's NEW JERSEY, Ericsson's Screw Propellers, &c., and several woodcuts. Describes a meeting of Symington and Fulton. The work gives a chronological sketch of English and foreign inventions, and was the first work of the kind ever published.
Woodcroft (B.) Sketch of the Origin and Progress of Steam Navigation. 140pp. small quarto, cl. £2 2s 1848
359a Another copy, extracted from an Encyclopedia, small quarto, cloth. 30/ [circa, 1848]

By Steam Alongside the Scottish Highlands.

1848 350 A good guide is a gift of the gods. The man who wants to carry 250 pages about the SCOTTISH HIGHLAND in his waistcoat pocket should take M'Phun of 1848. It was written by Fyfe, a scholar, and its descriptions are thorough, graphic, and unsurpassed, as far as the writer can judge after residential experience.

M'Phun's Steamboat Pocket Guide [to] Western Highlands and Islands. By Wm. Wallace Fyfe, F.R.S.S.A. 8th thou. 32° wr. 10/6

Reference Books.**Biographical.**

351 North's Life of Lord Keeper North, see under "Construction" (page 15)

Arago on Jas. Watt.

1839 351a THE first work below is a translation of Arago's Memoir republished from the Edin. New Philos. Jnl., and includes Lord Jeffrey's Panegyric, and the second is Muirhead's transn.—the Historical Eloge, special value attaching to this particular copy as having been presented "from Mr. James Watt, of Aston Hall, near Birmingham, the son of the subject of the Eloge, 11 Nov. 1840, N.S."

Life of James Watt. 142 pp. d8° 21/ 1839

Muirhead, J. P. Histor. Eloge of Jas. Watt. With portrait. 261 pp. d8° cl. Presen. copy, 25/ 1839

Williamson on Watt.

1856 352 The biographical papers below include a good sketch of the RISE OF STEAM NAVIGATION on the CLYDE. It throws much light on the character of Watt, shows the portraits after Henning and after Beechey, gives a view of the Comet vessel, and contains interesting references to Smeaton, Arago, Boulton, and also to Gregory Watt.

Williamson (Geo.) Memorials of James Watt. Fine plates. 262pp. 4° £2 2s Watt Club, 1856

Thomas Gray. His Own Copy.

1825 352a IN the copy below of Mr. GRAY's 5th edition of his "OBSERVATIONS" are some particulars of great biographical interest. It tells us what no one seemed to know before that Thos. Gray was born at Leeds, May 9th, 1788, and died 15th Oct., 1848, leaving a widow, three daughters, and a son. The son, who tried to induce the Ry. Cos. to give him a situation, writes a letter to Mr. HAYDON, presenting him on request with this copy, and urging influence to get him a situation. The holograph letter is bound in. From one of the newspaper cuttings we see that shortly afterwards (abt. 1850) his son died of consumption, some newspaper extracts referring to the claims of Gray, Thos. Summerside (spelt Summerville) speaks up for Geo. Stephenson, Mrs. Gray thanks G. H. H. for a kind suggestion, and says she has three daughters now living. Mrs. Gray died (aged 81), Sept. 21, 1872, and the last home of the family seems to have been at Exeter. Bound with the volume, which has additional interest from being GRAY'S OWN COPY, bearing his autograph, is a neat little edn.

(67pp. 24° 1846) of Wilson's *The Railway System and its Author*. It has additional pages with Press Opinions and a Dedication to all great hearted gentlemen. And affixed to the book is a rough portrait of Gray drawn from memory ten years after decease. THIS, WE BELIEVE, IS THE ONLY LIKENESS OF GRAY IN EXISTENCE, [and we propose to have a few copies taken of it].

Gray (Thos.) His Own Copy of His Observations, with many Biographical Items, and a copy of Wilson's little Memento. 8° hf. cf. £10 10s 1825, &c.

Telford.

1838 352b OF the genial Telford, the Surveyor of the Great Scotch Plate Railway of 1810, that friend of Robt. Stephenson (with whom he was intimate in life, and by whom he wished to lie in death), we have a substantial record below, written by himself and edited by an executor, chiefly, of course, describing the great works for which he was famous, his beautiful bridges, his substantial docks and harbours, the CALEDONIAN CANAL, the MENAI SUSPENSION BRIDGE, and so on. A large atlas illustrates the various works.

Autobiography of Thos. Telford, edited by Rickman. 2 vols 4° and folio. £2 2/ 1838

Henry Bell and Steam Boats.

Helensburgh, 1st March, 1824.

1844 352c (p. 75) "When I wrote to the American Government on the great importance of Steam Navigation . . . they appointed Mr. Fulton to correspond with me (so) . . . you see the Americans got their first insight of this system from your humble servant. (signed) HENRY BELL."

Such is a paragraph from the little biography below.

Norris (Ed.) The Life of Henry Bell (175+8+VI. pp.) with portrait and view showing "COMET." p8° 10/6 1844

Wilson or Mattalieu on Gray.

1845 352d The special copy below of Chev. Thos. Wilson's *The Ry. System* has written on the outside the words "With ALFRED MATTALIEU'S (THE REAL WRITER) KINDEST REGARDS TO HIS OLD FRIEND Dr. CAMMACK." This sounds as if it was something more than the claim of a translator.

Wilson (Thos., Esq.) Chev. de l'ordre du lion Neerlandais. *The Railway System* and its author Thos. Gray. A letter to Sir Robt. Peel. 39pp. 8° sewn. 30/ 1845

George Stephenson.

1857 353 In the picturesque life below we find the most charming History of the early days of the railway system yet written. Among references are those to Cugnot, Symington, Murdock, Trevithick, Blenkinsopp, Blackett, Nicholas Wood, Phillips, Wm. James, Pease, Giles, Palmer, Gray, John Dixon, and many others.

Smiles (Sam.) Life of George Stephenson, with portrait. 517pp. Liby. ed. 17/6 1857

Hedley. (See also 367).

1858 354 MR. HEDLEY (say) established the fact that locomotives Published by Edward Baker, John Bright Street, Birmingham.

could run well on rails without racks, and he made his locomotive (commonly called Blackett's) before Stephenson. It is also claimed for him that he invented the STEAM BLAST, that his chimneys were narrow, that his boilers had return tubes, that he could get sufficient steam power when Stephenson could not, and that practically he was the Inventor of the locomotive engine.

Hedley (O. D.) Who invented the Loco. Engine?
92pp. d8° 10/6 1858

Muirhead's Life of Watt.

1859 355 A KINSMAN of WATT's and the Son-in-Law of BOULTON, as well as the executor of WATT's son, the author had unrestrained access to the documents and anecdotes dealt with in this volume. In regard to LOCOS. after speaking of ROBISON, it is said (p. 424) that in August, 1768, Dr. SMALL informed WATT of young EDGEWORTH's energy over moving land and water carriages, and seven months later urged WATT to come to England because a draper named MOORE had secured a patent for steam wheel carriages, WATT's 1784 patent is described, and so also MURDOCK's model of same year (illus.)

Muirhead, J. P. Life of Watt. With port. 572 pp.
d8° cloth. 10/6 Murray, 1859

——— **Origin and Progress of the Mechanical Inventions of Jas. Watt.** 3 vols, 4° Large Paper Copy £3 15/; Small Paper Copy £2 5/ 1854

ROBERT STEVENSON.

1861 356 It is confusing to have two important early railway engineers the only difference in whose names is the "v" and "ph" in the surname. It is almost alarming, too, for the sake of clearness to find STEVENSON who is connected in these pages chiefly with the Bell Rock Lighthouse connected also with a 'Stockton and Darlington Ry.' He surveyed the FORFARSHIRE lines (*vide p. 33 supra*); suggested at a very early date a malleable iron railway as used in 1851, an idea taken up by Birkenshaw and mentioned in the quoted letter of GEO. STEPHENSON's. In this letter, dated 1821 GEORGE speaks of taking 40 to 60 tons 60 miles a day with his locos, and refers to STEVENSON's searches into the utility of railways.

Stevenson, Alan. Biog. Sketch of Robert Stevenson. 32 pp. 4° 15/ 1861

WILLIAM JAMES,

Founder of the Railway System.

1861 357 THE CLAIMS of Mr. JAMES to be the Founder of the Railway System rest on good grounds. He appears to have been a comparatively wealthy man, a Titan among land agents and the confidential agent of many noblemen, his business even bringing him into connection with King George III. and the Prince of Wales. Desirous of improving the value of estates he became impressed with the value of long tramroads to get minerals and produce to market. JESSOP and TELFORD were great tramroad engineers of his day but he himself seems to have been taken with a perfect mania for tramway surveying and engineering. Probably as early as 1820 he was a strong advocate for WROUGHT IRON EDGE RAILS. He advocated the use of locomotives on the Stratford and Moreton railway but was successfully opposed by RASTRICK. Before 1820 having heard of George Stephenson's engines he went up to Killingworth and subsequently appears to have suggested to George to GO and SEE PEASE at Darlington and induce him to make the STOCKTON and DARLINGTON LINE suitable for RUNNING LOCOMOTIVES UPON (likely enough too for passenger traffic). He followed his advice by an INTRODUCTION of some sort to PEASE, whom he knew. Later he FORMED the FIRST COMPANY and

surveyed the first line, BETWEEN MANCHESTER and LIVERPOOL having ROBT. STEPHENSON, Paul Padley, and others as his assistants, and nearly lost his life surveying CHAT MOSS. At the subsequent revival of the idea for the Liverpool railway he possibly advised SAUNDERS to send for Geo. Stephenson, who had by then gained experience on the 'Stockton and Darlington' line. Mr. JAMES now being in embarrassed circumstances had to retire from the headship of the Liverpool undertaking and the responsibility then fell on Stephenson. In 1820 he had a project on foot for a line from the STRATFORD-on-AVON and MORETON line to London (*via* the CHELTENHAM and GLOUCESTER) in connection possibly with wrought iron edge rails. If so it may have been (as claimed) the FIRST RAILWAY ever SURVEYED in the WORLD. If not we might exclude TELFORD'S CAST IRON TRAM ROAD from GLASGOW to BERWICK and call it the *first long tramway ever proposed in England*. Of much greater importance however is the fact that it seems probable that but for the great influence of James, Geo. Stephenson might never have made the STOCKTON and DARLINGTON line, might never have heard from the Liverpool people, nor from HENRY BOOTH as to his vitally important MULTITUBULAR BOILER, and neither made the Liverpool line, nor won the great locomotive contest. James, in fact, was at hand just when he was most needed. He was a strong advocate and worker for railways and his influence was powerful among rich and influential people. Altogether his claim to be the FATHER OF THE PRESENT RAILWAY SYSTEM is very strong and is indeed plainly admitted in the work below by ROBERT STEPHENSON, BRUNEL, LOCKE, RENNIE, and others. The author has grossly wronged James by unwise claims, but is the chief advocate for the man who discovered a means of starting the railway system as now understood, or, in other words, whose influence brought those different men together, to whose PERSEVERANCE and GENIUS and PRACTICAL ABILITY it may be said THE WHOLE WORLD OWES THE RAILWAY SYSTEM.

The Two James's and the Two Stephenson's. 121 pp. p8° 15/ 1861

Joseph Locke.

1862 358 MR. LOCKE was the greatest pupil of George Stephenson; but his biographer seems to have thought that the pupil was a greater man than the master. The "Grand Junction" affair was probably Mr. Devey's gauge. The pages below describe the famous "Contest," Stephenson's first loco, 'BLUCHER,' &c. Mentions the Booth and Senguin tubes, Mr. Locke's dealings with contractors, his firmness of character, &c., &c.

Devey (Jos.) Life of Jos. Locke, C.E., M.P., F.R.S., &c. With portrait. 366pp. d8° 10/6 1862

Smiles' Lives.

1862 359 Vol. I. treats of the early works of Embanking and Draining; Life of Myddelton; Early Roads and Modes of Travelling; Bridges, Harbours, and Ferries; Life of Jas. Brindley. Vol. II., Life of Smeaton; of John Rennie; and of Thos. Telford. Vol. III. Lives of Geo. and Robert Stephenson, with an Appendix answering the claims of Hedley and Hackworth to the Steam Blast invention.

Smiles (S.) Lives of the Engineers. 3 vols. roy 8° Library edition. £2 10/ 1862

Robert Stephenson.

1864 360 "MANY mistakes had been made in telling the story of the elder Stephenson's life, and no life of the younger Stephenson would be complete that should neglect to give

a correct account [of] the life of the elder," says Mr. Jeaffreson. And from these pages we hear of a connecting link between Trevithick and "old George" in the shape of John Steele (see also *Mining Journal*, 2 Oct., 58, 16 Oct. 58; and *Gateshead Observer*, Aug. 28, Sept. 18, Oct. 2, and Oct. 9, 1858); of the Blast Pipe question; of Robert S. and the multi tubular boiler, his work and a snubbing on the Lond. and Birm., his views on the Atmospheric System, of his magnificent bridges, &c., &c.

Jeaffreson (J. C.) and Wm. Pole. *Life of Robt. Stephenson.* Port. and plates. 2 vols, d8° 22/6 1864

Henry Booth.

1869 361 It would be a strong thing to say that Henry Booth invented the modern locomotive, and yet while some think the tube system has been overrated, there are, I believe, many who would assert that BOOTH'S TUBES did more towards the success of locomotives than any other invention, save perhaps that of the Blast Pipe, and no one knows who did invent that. M. Senguin's idea of tubes had been published in France before Mr. Booth's, but I think there can be no doubt that it was unknown to the latter or to anyone in England. The pages below show how great a share Mr. Booth had in the "ROCKET'S" success. A "dead failure" in the Corn Trade, Mr. Booth came to be known as a peculiarly gifted and able man in the railway world. He did not "wear his heart upon his sleeve," but Mr. Smiles has written a charming private memoir, and by it we can gauge his worth and see his many fine traits.

Smiles (Robt.) Mem. of Henry Booth. 117pp. d8° 21/ Privately printed. 1869

Trevithick.

1872 362 THIS work is got up in as attractive a style as Smiles' "Lives," and of course abounds with interest as to the earliest locomotives. It contains references to the invention of the BLAST PIPE, which seems to bear out the opinion expressed by JEAFFRESON in his *Life of R. Stephenson*, describes difference between Watt and Trevithick locos, says Budge went from the latter to the former, that probably more than one locomotive was made for the Welsh lines in 1802 (thereby opening out a most interesting subject); and states that repeated trials and experiments with locos drained the pockets of Trevithick and his cousin. But others (if not RENNIE) have thought him a "boggler." For his state reception in Peru see STUART [No. 277 *sup. a.*]

Life of Rich. Trevithick. By Franc. Trevithick. With port. and illus. 2 vols. d8° cl. 17/6 1872

362a **MEMORIAL** Edition of the *Life of R. Trevithick.* Illus. 24 pp. d8° 4/ Spon, 1883

George Stephenson—(a Singular MS.

1873 363 FROM a gentleman in Derbyshire, now deceased, there has come to my hands a MS. book from which was compiled the *Life of GEO. STEPHENSON* published by Bemrose, and compiled either by or for that curious old character THOS. SUMMERSIDE.

THOMAS, who was, 'OLD GEORGE'S' foreman on week-days, and a 'meenister' on Sundays, seems to have made it a kind of hobby to collect anecdotes of his old friend and master.

The first ten pages seem to be in his own writing, and the rest in that of a lady (possibly his daughter). The former were not published and contain a reference apparently to Mr. SMILES and also to SIR JOSEPH PAXTON (who seems himself to have contemplated a 'life'

of Stephenson.)

I give below what I think the substance of the Preface found in the MS., and also a strange paragraph written by the said lady but omitted in the printed edition.

SUBSTANCE of the MS. PREFACE ;—

My anecdotes were not compiled from 'hear-say' but from personal observation and interviews. I have treasured them up gradually during fifty years, and I, an old man now, should not like to die without publishing them. Don't call me egotistical. Like the best biographers, 'I saw, I heard, I noted,' and there can be no mistakes. I would even rather be blamed for egotism than report as having been done erroneous statements taken from the lips of those whose memories had failed, or whose knowledge was imperfect about him, or plagiarize from the writings of others what I did not know myself. . . . I want to bring out a book of Anecdotes at such a price that any youth may purchase, about the great man whom I knew when he was poor, with whose now famous son Robert I played in their humble cottage, about the father of locomotive travelling by steam, whom, when he grew rich, I served, whom, when he died, I helped to carry to the grave.

[The incident given on p. 30 of the printed text as to STEPHENSON'S and Dodd's mid-night adventure to discover the nature of an invention, was followed in the MS. with the following statement ;—]

THE OMITTED PARAGRAPH :—

I also heard young George Dodds state that the invention which was the making of Mr. S[tephenson] was brought from Tantoby by Charles Scorer, another brakesman. While Scorer was pointing it out, Stephenson came and looked over their shoulders, caught the idea, and at once utilised it. Those who knew him best will remember that in the absence of reading or writing, of which he was not an adept, it was his constant practice to exhaust everyone who knew more than himself.

Summerside's Life of Stephenson. The MS. and the Printed Work published by Bemrose. The MS. dated July, 1873. 2 vols. £4 4/

Mr. Cowen on Geo. Stephenson.

- 1873 364 [MR. JOSEPH COWEN at the Centenary of GEORGE STEPHENSON said: The Cornish Engineer TREVITHICK, our own Mr. HEDLEY—whose labours and whose discoveries I have often thought received very insufficient recognition—were busy with locomotives before STEPHENSON. But it remained for GEORGE STEPHENSON to COLLECT THE RESULTS OF PREVIOUS EXPERIMENTS and GIVE to THEM UNITY, COHESION, and PRACTICABILITY. This is pre-eminently a practical age and GEORGE STEPHENSON was pre-eminently a practical man.]

Boulton and Watt.

- 1874 365 IN the small edition below are the Lives of BOULTON and WATT, well illustrated and with very fine portraits of each. **Smiles Lives of Engineers.** 416 pp. 8° cl. 3/ 1874

Sir John Rennie.

- 1875 366 THE genial RENNIE must have seen his name on many railway prospectuses before he made a railway, and I have seen him classed even with Cundy. However the illustrious engineer has left an autobiography full of interest to the railway man. He sympathises with Trevithick, was, as a lad, impressed with Blenkinsopp's loco., says Ericsson's loco. at the Contest was considered the best, laughs over Telford and his oppos. to Rys., tells of his connection with the Liv. and Manch., the Lond. and Birm., the Brighton, and the Great Northern lines, and thinks well of the Atmospheric System.

Autobiography of Sir John Rennie. 464 pp. d8° With portrait. 10/6 1875

HEDLEY AGAIN.

- 1882 367 A FURTHER work dealing with HEDLEY'S claims appeared in 1882. It seems to be generally considered that HEDLEY should have more credit given him and I hope Mr. BELL may even be right in saying that he (Hedley) "made the first

locomotive which ever did any work worthy of the name." Mr. BLACKETT generally gets the credit and that seems very unfair. Mr. BURNETT (the maker of the first Midland loco.) gives the credit to JONATHAN FOSTER for making 'PUFFING BILLY.' [?] Archer, M. Wm. Hedley, the Inventor of Ry. Locom. on the Pres. Principle. 66 pp. 7/6 1882

JOSEPH FIRBANK.

1887 368 It is interesting to be able to look at railways by the life of a Contractor and Firbank makes a capital subject as having been one of the most straight forward men who ever lived, and connected with railway making from 1846 to 1886.

McDermott's Life of Jos. Firbank, J.P., D.L. Illus. 144 pp. d8° 5/ 1887

JOHN ERICSSON.

1890 368a THE name of ERICSSON at once calls to mind the LIVERPOOL CONTEST of 1829. And a quotation given in the pages below will serve to remind one of the old enthusiasm for the Swedish engineer.

"On the first day the ROCKET derived little benefit from the discharge of the exhaust steam up the chimney and made steam nearly as freely when standing as when running. Its mean speed was under 14 and maximum 24; or without a load 29. Ericsson's engine the NOVELTY shot past the ROCKET like a projectile."

Church, W. O. Life of John Ericsson, with portrait and numerous illustrations. 2 vols, d8° half calf. 24/ 1890

NICHOLAS WOOD.

368aa [In reply to an observation in a former publication Mr. Burnett has very kindly forwarded a biography of NICHOLAS WOOD, written by Mr. Richard Welford, the much esteemed local historian of Newcastle-on-Tyne, which appeared in the *Newcastle Weekly Chronicle* 10 Dec. 1892. Mr. Wood it seems became the chief authority on colliery practice in the Gt. Northern Coal Field, and after growing in wealth and honour died in London 19 Dec. 1865, and was buried at Hetton.]

[The Prices will be given upon application.]

MR. JOHN DIXON

1829 368b The able lieutenant of GEO. STEPHENSON; one of the engineers of the 1st Passngr. Ry., and of the victors of CHAT MOSS.

1796. Born.

1821. Surveys the "S. & Darl.

1823-5. Eng. S. and D.

1826. Eng. Cant. and Whitstable Ry.

1827-36. Eng. Liv. and Manch. (5 years sole eng.)

1836-7. Assists with S. Western, Brighton

(Steph.). North Un, B. and Derby.

1837-42. Eng. Ches. and Birk.

1842-45. Gen. Manag. Birm. and Derby

1845-65. Cons. Eng Stock and Darl

1852. (C) Eng Cocker-mouth line

1865. Died

[Vide RY. TIMES, Mar. 26, '42, JEANS *Jub. Memorial*, 1875, and Corres. herein.]

Re Locos. or Fixed Engines.

1829 368bb Copy of Draft of Geo. Stephenson's Report on LOCO. or FIXED ENGINES addressed to Direc. Liv. & M. Ry., dated 5 Jan., 1829. Mentions visit to Darlington 12 and 13 Dec., 1828, rough state of ry; temporary sleepers still remaining, stone blocks very small, embankments of very bad material, lines kept in bad repair for locos, speed $2\frac{1}{2}$ to 10 miles an hour, Locke and Robt. Stephenson expts. showing av. speed of $5\frac{1}{2}$ m. If all engines had been working on Reciprocating Plan both speed and effect would have been less.

SPEEDWELL line unfavble for locos. LOCO. could take 370 tons 56 miles in 15 hrs. Working cost $\frac{1}{3}$ d. per ton per mile.

HETTON Ry. Working cost 0.34d. per ton per mile.

With details as to STATIONARY POWER ending with estimate of cost of fixed engines at £150,000, and of Locos. £76,000, or at a total for Fixed Engines of 8 $\frac{1}{4}$ d. per ton per mile, for locos. 4 $\frac{1}{2}$ per ton per mile.

MS., 15pp. folio. I believe, in John Dixon's Hand-writing.

Re Grand Junction.

1835 368c DRAFT of a long letter from ED. DIXON addressed to JOHN MOSS, Esq., Chairman Grand Junct. Ry., dated Liverpool, Sept. 22, 1835, in answer to Mr. Moss' invitation to discuss with him the best mode of working the GRAND JUNCTION RY. (Our first big Passenger line.)

The writer after mentioning his long experience of rys. proceeds to discuss four plans. (1) Leasing line to an individual. (2) Opening line to public on Toll. (3) Leasing line to a carrying Co. (4) Co. itself working line.

In 1 an experienced Coach Master might make a good thing of it *for himself* and connect it with coach routes, and be able to "book through." Supposition taken of PICKFORDS becoming Lessees. Effect of transfer of their custom illus. by Hargreaves trans. theirs from Leeds and Liv. Canal to Bolton and Leigh Ry. causing great loss (by reduction of rates) to both Cos. It is a bad plan to force business out of its legit. channel. Personal supervision of a single principal instead of paid servants of a Co. overrated.

(2) Even when Liv. and Man. monopoly was talked so much about I never heard anybody suggest the wisdom of this plan for a railway. It would never do.

(3) The only reason I can see for this plan is to save trouble to the Directors.

(4) Will entail great anxiety and responsibility, as the L. & M. itself shows. Objections discussed. Extravagance of a Co., but a Co. should not be for mere personal profit but for public good as well. Expenses of L. & M. analysed [mentions enginemen's wages $\frac{1}{3}$ per trip, and firemen 15/- per week.] We should keep road in our own hands, in two years we shall have much more experience. Canals now charge less than rys, but public prefer to pay 20% extra for speed. Length of Grand Junct. will bring much business, but we should share traffic with canals, at as high a rate as Acts permit. There should be no connection with coach proprietors; great punctuality should be observed. Maintenance of road very small when there are no broken rails and split blocks to be provided. (I think Locos will become a distinct branch of business. Any person bold enough to lay out £70,000 for engines for Grand Junc. could demand far more than a reasonable trade profit). We ought now to order best engines from different makers. We should have a contractor to look after engines and men for a year. Coaches and waggons should be built partly by the Co. and partly put out.

Edward Dixon's Draft. 12 $\frac{1}{4}$ pp. folio.

George Stephenson to John Dixon.

1835 368d Of all the gifts of Almighty God, the gift of the gab is the greatest, said Geo. Stephenson. He seldom if ever wrote a letter, but would no doubt have delivered his opinion on letter writing in the same forcible style. Dictation however became second nature to him, and his known characteristics can be easily traced in the letters which have written down his quaint messages, some of which will be found below

1835 368d IN this, after referring to the demand for his services, the illustrious George says he knows that Mr. DIXON's salary is not equal to that of many men of less experience. Your present SALARY is £600, you *might* perhaps get, £1,000 or even more. I think it certain now that a line will be made from Ln. & Birm. to Newcastle-on-Tyne. We have a most excellent "line" from DERBY to LEEDS and the ground you know is favourable to YORK. It is clear now that the GRAND TRUNK THROUGH ENGLAND must be on this route. We shall take in Huddersfield, Halifax, and Bradford by cheap branches. Am just starting to go over the BRIGHTON and BLACKWALL lines. VIGNOLES is laying a line from RUGBY to DERBY. This will be another Southampton job for the Manchester people. What sagacity they have in their speculations. Old PEASE has taken 200 shares in the Brighton and 100 in the Lond. and Birm. line.

Dictated Letters from Geo. Stephenson, recd. 7 Oct. 1835, from Alton Grange, 4pp. 4° to J. D. at Manchester, and signed.

Pambour to John Dixon.

1836 368e THIS is a letter from the first great authority on Locomotive Engines, explaining to the Superintendent of the first Locomotive Passenger Railway an error in his (P's) calculation, in further reply to a request for an opinion as to the dimensions of an engine to answer Mr. Brunel's specification.

Holograph Letter signed G. de Pambour addressed to John Dixon at the Ry. Office, Manchester, and dated London Sept. 20, 1836 (2½pp. 4°)

Re Chester and Birkenhead Ry.

1837 368f MR. MURRAY GLADSTONE thanks J. D. for his interest in Chester and Birk. line, mentions its supporters, opponents, and final success through the "Lords." Thinks the line should now be made at once before the trade can be diverted by the Grand Junction.

Holog. Letter from Murray Gladstone add. Ry. Office, Waterloo St., Birm., dated June 30, 1837. 3pp. 4°

Geo. Stephenson to John Dixon, dated Tipton House, Jan. 11, '46.

1846 368g " . . . if they cannot sell the engines to other people they must trust you till you can pay.

I wish I had an opportunity of seeing you a little oftener, you are always getting alarmed about little things; keep up your spirits, you will be all right in the course of the summer. You have no occasion to fret about a situation as long as I am in the land of the living. I have just tendered for another large coal field, and intend to open some extensive lead mines. . . . I

think we shall now take up the connecting link from the Darlington Railway to the Durham and Sunderland Junc. This will complete the thoroughfare from London to Newcastle. . . . Mrs. Stephenson and Miss Brown join me in kind regards to Mrs. and Miss Jane Dixon. 4pp. and one crossed. 4°

Geo. Stephenson to John Dixon. Re Cockermouth.

- 1846** 368h WHEN I received yours of the 17th I thought the sea had been breaking in on you. It is said to have done more damage to Brunel than the whole cost of your line. It has not done much at Holyhead. If it is fair for the contractor to have the extras I should fear no man in stating it . . . let me go through them with you. I am surprised at your Cockermouth line. . . . I think Lord Lonsdale is hard to deal with. I have given up the Whitehaven and Furness Railway into Robert's hands. I want now almost to retire from business, and I think that although you are not near my age you ought to be doing the same. Then follows a reference to "Jane" [Miss Dixon] now stopping with him and to Robert (J. D.'s brother) having just arrived in England. Dictated and signed Letter from Geo. Stephenson. 4pp. 4° dated Tapton House, Nov. 20, 1846 (on black edged paper).

Robt. Stephenson (to J. D.) on Bridges.

- 1849** 368i THIS to "Dear Dixon" refers to the Hownes Gill Bridge. "No one can accurately calculate the time requisite to form an Embankment, or say that the latter is cheaper than a bridge at a height of 170 feet—even for Hownes Gill. Cost is about equal at 70 or 80 feet. I should dispense with fishing by introducing inverted arches into a foundation wall laid entirely across the gill, carrying a solid rubble wall a considerable depth below the inverts into the ground. Thus to distribute weight of superstructure over the entire area of the bottom . . . cheaper and safer with a treacherous material as foundation. Fire and height objection to wood. Holograph Letter from Robt. Stephenson, 4pp., 4° dated 9 Aug. 1849.

Robert Stephenson to John Dixon.

- 1850** 368j REGRETTING he cannot get to Darlington on 22nd because "we are going to move one of our tubes at the Menai Straits." Letter from Robt. Stephenson. 2pp. 4° dated 12 May 1850.

Robt. Stephenson to John Dixon.

- 1852** 368k I shall be glad to assist you, . . . come to London. I think I made a report to the S. & D. on this bridge before rec something more durable than timber. I do not like the creosoted timber as used by Brunel. A Newport bridge was destroyed by fire. Letter from Robt. Stephenson dated 5 May 1852

Whitehaven Junction Ry.

1852 368l LETTER from GEO. DIXON to JOHN DIXON. "*My dear Sir*" *it was only old Piel's wall that the sea has broken in through.* The letter speaks also of the Furness line proposed extension through the streets: *it is called a tramway to blind the people,* and has a reference to an Aunt Margaret.

Holo. Letter from Geo. to John Dixon. 6pp. p8°
dated Whitehaven Feb. 6 1852.

Joseph Locke to John Dixon. Re Bell.

1852 368m "*My dear Sir,*"—If W. Bell will send his address to the office on Aberystwith line work shall be found for him "on your acct." Glad to see your handwriting, and to hear you "*jog on happily*" even tho' in a small way, and am very glad too that you have provided for that rainy day when the "*poor Richards*" of this world cannot work. I have everything to be thankful for, and Errington and I go on together as of old, never dreaming we are getting older every day. I do not know who is your happy partner, but if you will present the respects of one of your friends and fellow-workers to her it will be one step towards a better acquaintance."

Holog. Letter Jos. Locke to J. Dixon, dated 11 Adam Street 21 Aug. 1852. 3pp. p8°

Bidder to Dixon.

1861 368n LETTER from W. J. Kingsbury for Mr. Bidder answering enquiry re Friction and pointing out an error underlying certain experiments.

MS. Letter Bidder (Kingsbury) to Dixon. 2pp.
p8° 29 Aug. '61.

Re Stockton and Darlington.

1862 368p Mr. FALLOWES of Middlesboro' having asked as to date of laying the First Rail of the "Stockton and Darl." near St. John's Well, Stockton, Mr. Dixon says he was present, and it could not have been earlier than Autumn of 1821 (letter endorsed Act . . . amended line May 23, 1823). Mr. F. replying says he finds it was 23 May, 1822; that he also was present; that curiously he can find no account of it in the local papers.

Draft of Letter John Dixon. Darl. Sept. 1 1862.
Reply from Mr. Fallows dated 8 Sept. '62. Each 2pp. p8°

Samuel Smiles to John Dixon.

1864 368q LETTER from West Bank, Blackheath, seeking information about the Newcomens of Redcar, and remarking that Mr. Dixon must now be THE PATRIARCH OF THE RAILWAY WORLD.

Holo. Letter from Samuel Smiles, 2pp. dated Nov. 5th, 1864.

SPECIAL NOTE.—AN OFFER.

Thinking the above Correspondence of very great interest it

will afford us great pleasure to have COPIES taken of all or any of the separate MS. letters and papers. It might also be useful to the libraries. Unless this offer is accepted AT ONCE however we have reason to expect that future access to the papers will be impossible. Many collectors of early railway literature are extremely busy men." [A small charge will be made for the copying.]

Financial.

The First Shareholders' Guides, 1845-1848.

1845 369 MR. TUCK started his SHAREHOLDERS' MANUAL in the great mania year 1845, and it went through no less than five different editions, of which the 1st, 3rd, 5th, and 6th will be found below. It urged investment in railways, and quoted Lord Bacon's assertion that "*Money was like muck, and did no good till it was spread.*" The first edition gave an abstract of Acts; the length, course, gauge, date of openings, cost, time over main journey, fares, capital, earnings, cost of working, and price of shares for six years of each railway, synopsis of foreign lines, list of projected lines, etc. [102pp]. The 3rd edn. was 121pp., the 5th, 154pp [including Bills in Parl.] and the 6th, 245pp., including the gross earnings of the lines and all new projects. In the 7th edn., 1846, the famous Tuck Spackman correspondence appeared relating to the compilation of the disastrous article in *The Times*, and on p. 39 the Grand Junction is now called GREAT LONDON AND LIVERPOOL RAILWAY, late Grand Junction Ry. The edition had 300 pages, and included foreign and colonial projects. The eighth edition did not appear till 1847, but had then 409 pages. It was still angry at *The Times*. The names of the Chairman, Secretary, and Engineers of each line were now added. In the ninth edn., 1848, there were 488 pages, and particulars of existing railways in greater detail.

Tuck. Shareholders' Manual. First Edn., 1845; Third Edn., 1845; Fifth Edn., 1845; Sixth Edn., 1845; Seventh Edn., 1846; Eighth Edn., 1847; Ninth Edn., 1848. 7 vols. p8° 35/

Bradshaw. Shareholders' Guides, 1848 to 1861

1848 370 WHEN Tuck had reached maturity, Bradshaw's Railway TO Almanack, Directory, Shareholders' Guide and Manual **1861** came into the field—very humble-looking. But it had a good map, 4½ pages on the "Electric Telegraph," a "Travelers' Directory," showing best conveyances by road, rail, &c., from London to chief towns, with distances and fares, &c., and had 137 pages. It was, however, well received, and by skilful analyses of the various companies financial positions, and by epitomising agreements, the Bradshaw reputation grew and rooted.

Bradshaw's Shareholders' Guide for 1848, 1854, 1855, 1856, and 1861. 5 vols. 25/

The Great Financial Reference Book.

1849 371 JUST before the Hudson crisis Mr. Scrivenor's work appeared. In his introduction he spoke of Liverpool's position in the railway world, of the starting of the L. and M. line, the contest, etc. and referred to the Garnkirk Co.'s loc

(which cost £750) built by Stephenson, and the 2nd in Scotland having been sold for £13. He offered a book of reference backed by the knowledge gained as Secy. of the Liv. Stock Exch., he described the essentials of Co.'s accounts, and how he had treated them on one uniform system. He spoke of the past, present, and future prospects of the railway interest, and then gave full financial particulars of each railway in his ever-esteemed reference book of over 800 pages.

Scrivenor (Harry) The Railways of the United Kingdom Statistically considered. 8° 10/6 1849

Finance of the Cos., 1856 to 1873.

356 372 THE Financial Career of the Various Companies can also be well traced from "RAILWAY INTELLIGENCE," compiled by M. Slaughter, under the sanction of the Committee of the Stock Exchange.

Railway Intelligence. Nos. IX., 1856; X., 1859; XI., 1861; XII., 1863; XIII., 1865; XIV., 1867; XV., 1869; XVI., 1871; XVII., 1873; 9 vols. 8° cloth. 42/

Legal and Parliamentary.

ACTS for 1830 to 1874.

830 373 FROM Mr. BIGG's well-known and neat little work we can get an easy reference to all the Acts, and see their titles at a glance.

Biggs (Jas.) General Railway Acts. 689pp. p8° cl. AS NEW. (18/) 5/ 1875

Railway Law at the 2nd Mania.

837 374 THIS edition of Wordsworth, published at the time of the second railway mania, made references to the then numerous schemes, to a proposed 10% profit limit, to railways not coming under the Bubble Act, and to some liabilities of original shareholders in abandoned projects.

Wordsworth (C. F. F.) Law of Joint Stock Cos. p8° 5/ 1837

Epitome of First Acts in England and Scotland.

838 375 IN the following little works we get a neat Epitome of the Laws for Railways in England, 1838 to 1845, and a companion volume of those of Scotland of like date.

Public General Acts for (a) England, (b) Scotland. 2 vols. p8° 7/6

Gladstone's Act.

844 376 BELOW is a reprint of Mr. Gladstone's Act (7 and 8 Vict., RINTED cap. 85) for Parliamentary Trains, &c., referred to p. 5 *supra*.

Reprint of Gladstone's Act of 1844. 1/6 Rep., 1874

Railway Law at the 3rd Mania.

845-6 377 OF two Parliamentary Law Books of the Third Railway Mania, Collier's gave 116 pages on 8 Vict., 29; 75 pages on

8 Vict., 16; 93 pages on 8 Vict., 18; and an appendix, an explained the conditions to be complied with and steps to be taken to start a railway. While Riddell the next year lucidly explained the way in which Parliament deals with Railway Bills.

Collier (R. P.) Railway Clauses. Companies' Clauses and Land Clauses Consolidation Acts, &c. p8° 7/6 184

Riddell (Henry) Railway Parliamentary Practice. p8° 7/6 184

Legal Decisions up to 1853.

- 1853** 378 At Easter Term, 1853, Mr. Shelford wrote 826 pages of Railway Law, with copious notes on Decided Cases, and particularly on the three Consolidation Acts, 1845.
Shelford (L.) Law of Railways. d8° 5/ 185

Commons' Reports.

- 379 A large number of House of Commons' Reports (including many on Accidents, 1853 to 1877), are in hand, particulars of which will be given in some further publication.
Commons' Select Committee Reports. Prices on application.

Lists, Analyses, of Rys.

PRIESTLEY.

- 1831** 380 THE wonderful "Manchester and Liverpool" Railway was in going order when JOSEPH PRIESTLEY (dating from the "Aire and Calder Navigation Office") issued his "HISTORICAL ACCOUNT." He has heard of "TREVENTHICK" (as he calls him), tells us that BLENKINSOPP was Mr. BRANDLING's local manager, puts GURNEY's name before STEPHENSON'S or "ERRICKSON'S" (*sic*) and thinks ere long his Majesty's mails will be conveyed on the plan of Mr. DICK (!) Particulars are given of the few modern railways and the many plate lines, dates of Acts, course of line, particulars of company, &c. An indispensable reference book for all railways at this date.
Priestley (Jos.) Hist. Acct. of the Navigable Rivers, Canals, and Railways of Gt. Britain [as a reference to Nichols' . . . Map]. 702pp. d8° 21/ 1831

Whishaw's Analysis.

- 1837** 381 These pages describe the courses of PROJECTED RAILWAYS. It includes the different proposed lines to Brighton, the two celebrated lines from MANCHESTER (entering into historical and critical details of the latter), mentions the Engineers connected with them, gives a good GLOSSARY of terms. A rare and unique little work.
Whishaw (F.) Analysis of Railways. 296pp. d8° cl. 25/ 1837

Prospects of Companies.

- 1838** 382 A glance even at the date of this little reference book will show its importance. It was written by a Manchester

Geologist, and is an attempt to show the PROBABLE SUCCESS or FAILURE of the Midland, Lancashire, Yorkshire [and Scotch] Rys. of the period. A Railway is called expensive at £20,000 and cheap at £15,000 per mile, and the author thinks local traffic more important than direct lines, that cheap fares are better than maximum speed, that railways will suit heavy goods (for the "Leic. and Swan." pays 8% to 10%). Then comes a short sketch of rys. in prospect, followed by 64 pages of description under the headings of 14 lines or systems, with four col. maps.

A Few General Observations on the Principal Rys. exec., in progress, and projected. d8° 21/ 1838

Whishaw *

340-42 383 THIS is the most useful reference book of its date, the main part of it giving, under the heading of the companies, the Course and Shape of Line, Acts, Capital, Buildings, Establishment, Revenue, Descriptions of Rolling Stock, Waggon, Carriages, and LOCOMOTIVES. Pages follow on loco, expts. on diff. GRADIENTS, and then an acct. of Whishaw's RECIPROCATING SYSTEM of Rys., TABULATED DETAILS concerning the LOCOMOTIVES of the Companies, Standing Orders of Parl., PLATES showing locos. of the day (incl. the American LICKY INCLINE ENGINE), and railway carriages, waggons, &c., together with a MAP of the U.K. showing the railways opened or progressing.

Whishaw (Francis) The Railways of Gt. Britain and Ireland. Abt. 500 pages. 4° £2 2s 1840 or 1842

List of Lines.

341 384 MANY PARTICULARS CONCERNING EARLY RAILWAY LINES, not obtainable elsewhere in a handy form, may be found in *Knight's British Almanac* for 1841, which devotes no less than FIFTY-FIVE pages to the subject, and gives THE BEST LIST I HAVE EVER SEEN of the EARLY PLATE and PASSENGER LINES (135 mentioned). for we get not only the dates of Acts, and of Openings, the capital, and the length, but also a statement as to the POWER USED ON EACH LINE (Locomotives, fixed Engines, &c.), and the object of the railways (whether for passengers or goods), the gauge, &c. The earlier issues also give references to railways.

[Knight's] Almanac and Companion. Vols. from 1831 to 1841, both inclusive (but excepting 1834 and 1836). 9 vols. p8° cl. 18/

Railways in Scotland.

341 385 IN Oliver and Boyd's Almanac for 1841 there is a list of Scotch Railways, devoting about a dozen lines to each of the 17 Railways. It is the only list of its kind (except in "Whishaw").
Oliver and Boyd's Almanac. 12° 10/6 1841

Dictionary of Dates.

347 386 IT will be found that a set of these Dictionaries (omitting certain years) will be very useful for tracing the dates of openings. Of course, as the companies altered their names

*|Unfortunately this name has occurred elsewhere in these pages as "WISHAW."

or amalgamated, and later editions abridged the early information, the modern issues alone will be useless. The first edition of HAYDN was published about 1843.

- Haydyn or Townsend Dict. of Dates.** 4 various issues between 1843 and 1877. 20/ 1847, &c.
1861 387 **Railway (The) and the Mine (Lever's Year Book),** 79 pp on Railways, including a list of 139 passenger railways ARRANGED ACCORDING TO DATE OF OPENING, list of the railway officials of 1861, notes on the railway press, and 100pp on Coal Mines. 8° cl. 5/ 1861

Various References and Records (including some Medals).

Gray's Contributions.

- 1824** 388 **DOUBTLESS** in 1824 a good article in the *Gentleman's Magazine*, advocating railways, would be very influential in urging forward the claims of the railway system at that early date. Two such articles appear in the interesting pages below.

The Gentleman's Magazine for 1824. 2 vols. d8° hf. cl. 10/6

- 388a IN the *Westminster Review* GRAY's claims were stoutly defended (and in the same article was predicted the extinction of horses as a moving power in Eng. within five years).

Westminster Review, No. LXXXVI. Orig. wr. VERY RARE. 21/ 1845

Sir Richard Phillips and Hancock.

- 1832** 389 Sir Richard, who himself advocated railways at an uncommonly early date, makes Hancock's Steam Carriage the frontispiece to this edition of his *Million of Facts* and calls it "THE TRIUMPH OF MECHANICS in 1832."

Phillips (Sir Rich.) A Million of Facts. 7/6 [1832]

The Literary World.

- 1839** 390 THIS little illustrated Journal used to make constant references to RAILWAYS, and they included in 1839 an interesting reference to WROUGHT-IRON WHEELS (p. 372), an early TRAVELLING POST OFFICE on the "London and Birm." line, a long description of that line, &c., &c.

Literary World. A Journal edited by John Timbs. 2 vols in 1. 382pp. d8° cl. 15/ 1839

Salt.

- 1850** 391 IN this edition references are made to Tommy Shops, Glyn on Competition, Oldest Scotch Ry. (to Newhaven), "Ed. and Glas." foregoing dividend, Ry. Commissioners, Cheap Fares, G.W.R. invading North, Proposed Grand Junct. Broad Gauge, L. and Y. Rolling Stock, The Gauges, The Hudson Crisis, &c., &c.

Salt. Ry. and Com. Information [statistical facts]. 240pp. p8° 7/6 1850

Old Durham Railway.

- 354 392 THERE are nine pages of great interest referring to the Durham Ry. in Longstaffe's *History of Darlington*, inc. refenc. to JOHN DIXONS' early proposed Darl. railways, Longridge partner in "Stephenson & Co.," Clarence Ry. trains once "stopping anywhere" (now pt. route Leeds to Ferryhill); curiosities of horse rys., etc. Longstaffe's *History of Darlington*. Fine copy in calf extra. (From the Dixon library.) d8° 35/ 1854

Signals.

- 69 393 Particulars of the Patents for Signals from 1840 to 1866 will be found below.
Abridgements of Specifications of Ry. Signals and Communicating Apparatus. 48opp. p8° (cover loose). 7/6
 Patents Office, 1869

MEDALS.

- 394 AMONG the Series below the first by date is one of the "LIVERPOOL and MANCH. line." George Stephenson on the obverse and the Bridge at Newton (Junction for Birm.) on the reverse, with 15 Sept., 1830, mentioned as day of opening. (The loco. shown is more like "PUFFING BILLY" than a loco. of date.) Another Medal to "commemorate the opening" shows the SANKEY VIADUCT on one side and the ENTRANCE TO THE LIVERPOOL STATION AND TUNNELS (a curious fortress like place) on the other. A year before the G.W.R. got its Act in England the famous LEOPOLD (once son-in-law of our late King George IV., then of Louis Phillipe, and uncle of our present Queen), issued his DECREE for the construction of the State Railways of Belgium, and the medal struck shows the King on the obverse and an allegorical design on reverse (1 Mai, 1834); then comes the inauguration, "du chemin de fer" Régence d'Anvers, with an alleg. winged-wheel car bearing the cornucopia (3rd May, 1836); then with King Leopold on obverse another medal shows a locomotive approaching the City of Ghent (Gand) 28 Sept., 1837; two years later comes a medal to commemorate the "Embranchements du Canal de CHARLEROY; then a beautiful silver medal commemorates the incorporation (4 July, 1844), and shows the pride taken in the WHITEHAVEN JUNCTION RAILWAY, Rich. Armitstead, solicitor, on the reverse; then comes a little Belgian medal in inauguration de la station centrale (!) a Lichtervelde (6 Apr., 1847), on the WEST FLANDERS Ry., and showing on a six-wheeled loco. the tube reaching over from tender to the top of the fire-box; also a little token struck by Hanks and Lloyd, of Sydney, to blend the memory of their tea with the opening of the SYDNEY RAILWAY, 26 Sept., 1855.
 In 1834 a medal was struck to honour the memory of Pierre Simons, who died "à bord du navire de l'état LOUISE MARIE (on way to S. Amer.), ingénieur illustre il traca les premiers plans du C. de fer Belge dec. par la loi du 1 Mai, 1834.
 An interesting little mememto of the OLD SHEFFIELD and ROTHERHAM line, giving date of open. as Oct. 31, 1838, comes in the shape of a little omnibus check, "No. 3," 643.
 In 1843, 15 Oct., we have the "inaug. du ch. de fer internationale Belge-Rhenan" loco. on obverse, and arms (double-head eagle and lion rampant) on reverse; of the same year is a fine large medal with King Leopold on obv. and alleg. design on reverse, and motto with words. "Inaug. du c. de fer de VERVIERS a AIX-la-CHAPELLE, &c."
The Collection of Twelve Medals, dating from 1830 to 1855 (one silver). £6 6s

Magazines.

The Magazines below might be looked upon as forming the detailed connected record of railway work. In some we can watch the development and construction of railways, and of rolling stock, and the gradual improvement in locomotive mechanism; while from others we can trace the careers of the old companies, and see the important parts taken in those careers by the emphatic personalities who made them what they were. It is as well to add that some good railway periodicals have lately grown unprocurable and that most of them are very scarce.

REPERTORY OF ARTS.

1794 395 "UNTIL the commencement of the *Repertory of Arts* by Mr. Wyatt (says Stuart) ninety-nine out of every hundred patents were unknown to any except their authors." It was through it that NICHOLAS WOOD heard of the latest inventions (*vide* his work on Railroads, 1st ed., p. 133), and in WYATT we have to look for references to all our oldest railway patents. A majority of the articles are papers descriptive of the patents, not merely specifications.

Wyatt's Repertory of Arts. 87 vols., extending from 1794 to 1842, excepting about ten volumes, but including two INDEXES of PATENTS and PATENTEES, 1815 to 1845. £5 5s. [Also 45 vols (1805 to 1825), bound into 25 vols., with index and plates. (Price on Application.)] 1794, etc

The Glasgow Mechanics' Magazine.

CIRCA 396 THE date of the original issue was possibly earlier than that of the (London) *Mechanics' Magazine*. At any rate, on p. **1823** 146, Vol. IV., an article on BURSTALL and HILL'S STEAM CARRIAGE speaks of it as nearly complete, and the date of its patent was, according to HEBERT, Feb. 3, 1824, and **REPRINT** **1833** acc. to *Repertory of Arts*, Feb. 3, 1825. A second edition was issued in 1833, when this article was not altered, but a glance at p. 320, Vol. V., describing the "Manch. and Liver." locomotives, shows that *additions* were made after March, 1831 (a date mentioned).

On p. 257, vol. I., is an illustration of a LITTLE MODEL LOCO. made on Trevithick's plan by one "J.C.", of the Anderson's Inst., Glasgow, to illustrate a lecture by Dr. Ure. This "J.C." was then about to make another only 3 inches long. In the 5th vol. we see an article on Railway Experiments, in which the HIGHLAND SOC. OF SCOTLAND is referred to as considering the defects of land-carriage, and a statement that a proposed Assoc. (composed of professors and other scientific men) who will be "happy to avail themselves of the aid of engineers" is about to be started. This "*Edin. Assoc. for Railway Experiments*" was to have a LITTLE RAILWAY, A LOCOMOTIVE, and a WEIGHING MACHINE.

Glasgow Mechanics' Magazine. New Edition, with portraits of Watt, Anderson, and Playfair. 5 vols. 21/ Reprint, 1833-4

Ditto. Re-issue of this New Edition, with Ericsson's loco. **Wm. IV.**, and portrait of Playfair. 5 vols. 21/ Re-issue, 1839

The Mechanic's Magazine.

1823-44 397 THIS was edited by J. C. Robertson, who in 1838 established the *Railway Times* (of which he was editor till

Published by Edward Baker, John Bright Street, Birmingham.

1840). In the pages of the *Mechanics' Magazine* we look for the earliest references to the early Mechanism of Railways. Vol. I., published in 1823, had the article from Gray signed "T. G.", and a reference to Jacob Perkin's famous High Pressure Engine. In 1824 Gray contributes again. The items in other years, while not profuse, are of importance, and space forbids the giving of my list of ry. items, but the desc. in Vol. XI. of the opening of the little line near Dudley in 1829 with the Agenoria loco. (*vide* Stretton), carrying 1,000 passengers on this occasion, must be noted, and also the very fine series of portraits, including those of Braithwaite, William James, and Jacob Perkins.

Mechanics' Magazine. Vols. I. to XLI. 41 vols.
£5 5/ 1823-1844

Technical Repository.

1824 398 MR. THOMAS GILL'S Vol. VI. of the above quotes in five pages the now exceedingly rare prospectus of the LIVERPOOL and MANCHESTER RAILWAY, dated Liverpool, Oct. 20th, 1824.

Technical Repository. Vol. VI. 432pp. 8° 10/6
1824

Register of Arts.

1824-32 399 THE first volume of this had a view of Palmer's Suspension Ry. at Cheshunt on the cover, it was published by G. Hebert, and contained an acct. of Palmer's proposed line to Brighton, with sails, and of course Jacob Perkins was to the fore with his h.p. engine. The same year the 2nd vol. appeared, and had references to the Killingworth Engines, W. H. James' Ry., James and Gordon's Carriages, Vallance's Atmos. Ry., and Evans' discovery. In 1828 Vol. I. of the new series appeared, edited by L. Hebert, C.E., and pub. by Steill. Steam carriages were then the order of the day, but it described the Liverpool contest, and while the *Mechanics' Magazine* supported Braithwaite the *Register of Arts* preferred GEO. STEPHENSON and his "ROCKET."

Register of Arts. Vols. I. and II. (1824), and Vols. I. (1828), II., IV., V., VI., and VII. (1832), of the new series.
8 vols. 8° Very rare. £2 2s 1824-32

Mechanics' Register.

1824-5 400 VOL. I., 1824. contains a criticism of the Prospectus of Liverpool and Manchester Ry., with references to its economy of rates and speed, and its use also for Passengers. Speaks of the BATH and BRISTOL, and Gravesend projects, and advises investment in them; criticism on the extract from the "*Scotsman*" articles, Objections to Railways (proposed DOVER LINE mentioned), Killingworth experiments with assurance of practicability of passenger traffic; Brown's 'Gas Vacuum' engine criticised (and an order from King Geo. IV. mentioned), long review of Gray's Observations, *Scotsman* criticism of Brown's Pneumatic Engine; Answer *re* an IRON WAY SUGGESTION BEFORE GRAY. Vols II and III., 1825.

Mechanics' Register. First three vols. 8° 25/

American Mechanics' Magazine.

1833-37 403 THIS work gives many references to early locomotives. Vol I. describing how Baldwin's Engines surpass Stephen-

son's, and a speed of 62 reached on the Philadelphia line. Vol VIII. in a short sketch of the Hist. of Locomotion in England and America mentions the fine performances of the American locos. on gradients and an intention to run locos. over the Alleghanies.

American Mechanics' Magazine. Vol I. 1833 to Vol IX. 1837 (Vol IV. missing) 8 vols. 8° hf. calf. Very rare. £3 10s

Railway Magazine.

- 1836-9** 404 THIS was the pioneer publication of the railway press. John Herapath became proprietor and editor in 1836, and for two years he seems to have had the whole railway field to himself. He was, I think, a native of Bristol, had a curious dispute with Sir Humphrey Davy, and was once offered a professorship at University College. In the railway world he was famous for his investigation into "four or six" wheeled locos. for his oppos. to the Atmospheric System, and to the Stephensons. Before the days when his opponent *The Ry. Times* tried to ruin the 'London and York' with pure calumny and failed, HERAPATH with enormous power of ridicule made the 'Eastern Counties' a laughing stock and coupled with its early bad management seems to have sapped for ever all its hope of genuine success. But he made many mistakes, as, for example, when he proved that in 1836 that railway trains could not possibly go at 80 miles an hour. Many extremely valuable papers and maps occur in the early volumes both on construction, and relative to the history of the early companies. The Magazine is growing very scarce, it seems impossible now to get a uniform set, and it will no doubt shortly be unprocurable in any form.
- Railway Magazine.** Vols I. to V. (not uniform) 8° edit. 5 vols, 1836 to 1839. £5. Vols II. and III. separately, 1837 15/ each.

Civil Eng. and Architects' Journal.

- 1837-57** 405 THE very first article published in this magazine (October 1837) was one of 5½ cols. in length, copiously illustrated, describing American Railway Construction. Notices about English and Foreign railways were here given from the days when the only railway paper was "Herapath," in octavo, when the references to railways were extremely few. It gave some good reviews of books. The first volume also contained an account of the ROBT. STEPHENSON'S PRESENTN. (with a speech by his father), Curtis' Boston Ry. CARRIAGES, like the Greenwich, and a review of SIMM'S 'Public Works.' In the following volumes there were many references to the Companies, to construction of railways and locomotives, including Steam Carriages, wood tyred wheels, American locos.; notes on Dartmoor Ry. (Sept., 41, p. 322), Alan Stevenson's R. Signal Lights (May, 41, p. 150), Hancock's Train controller, and so on. In 1842 rfses. to Electro Magnetic locos., Stephenson's loco., axles, brakes, gauges, gradients. In 1843 review (p. 241) of Bishop's Descrip. of NORRIS'S loco. PHILADELPHIA for the 'B. and Glou.' Ry. : rfses. to the Blast Pipe (p. 77); to Loco. Reversing Appar. (p. 148). In 1844 to Atmosphere Rys. In 1846 to an important Synopsis of the Rys. incorp. in 1845. In 1847 an article on Rapid Ry. Travelling. In the vol for 1857 a desc. of Neilson's improved loco boiler and a short review of Kitson's bk. on lighting trains with gas.

Civil Engineer and Architects' Journal. Vols No. 1, 1837-8, and also for 1839-40-41-42-43-44-46-47 and 57. 11 vols, sm. 4° £4 10s

Royal Engineers' Papers.

- 1837** 406 **AMONG** the papers referring to Railways are Capt. Alderson's Report on the "Manch. Ches." and the "South Union" Rys. (both from Manchester to Rugby) with map; desc. of the Weeden Drawbridge on Lon. and Birm. Ry.; of the bridge near Sawley on the Mid. Cnts. line, made at Butterly Wks., with sev. plates and tinted frontis. showing old train with open carr. passing over the beautiful bridge; a paper on Spencer's Pile Driving Machine, Amer. Rys. on Piles ("N. Y. and Erie" illus.); Dempsey on the Const. of Rys., on Bricklayers Arms Stat. Roof: together with many plates illustrating Mr. Dempsey's papers, of stations, engine-house, watering apparatus, carriages, waggons and wheels.
- Papers on Subjects connected with Duties of the R.E.**
The first nine vols, 4° with plates. £4 10/ 1837-47

Civil Engineers' Transactions.

- 1838** 406a **IN** the third volume of the work below occurs the paper by Mr. Parkes in which he attempted to show that little value attached to the elaborate experiments of Pambour, a paper whose "pretended verifications" aroused the ire and eloquence of the latter in his edition of 1842. And also a paper by Bury on the "Lond. and Birm." Locos. (illus.)
- Transactions of the Inst. of Civil Engineers.** Vols II. and III. (the latter vol in 5 parts, each in cloth). Altogether 6 vols. £3 10/ 1838-42

Mechanic and Chemist.

- 1839** 407 **I** find in the only procurable copy that the pages of this little Magazine are full of references to railways. The Lickey Incline is dealt with, and a copy of Capt. Moorsom's reply to the charges against him for not employing English engineers, saying, "it was not until they (two celebrated engineers) had declined to undertake an order that a negotiation was set on foot with an American engineer." On p. 238 it describes "THE ENGLAND," on p. 357 the So. Australian Ry.

The Mechanic and Chemist. 398pp. d8° Vol. IV. 10/6 1839

The Railway Times.

- 1838-53** 408 **THE** *Railway Times* was the first weekly railway paper. It became a success, and when opponents appeared it took the lead as the most widely circulated of all. For 1838 and most of 1839 it is the only great record of the doings of the early companies. *Heraclitus* was published weekly in quarto in 1839, and they then together represented the weekly press till 1844, when other good papers appeared. *The Times* tried desperately to kill the "London and York," presumably to satisfy the Eastern Counties, London and Birm., and Midland powers. It must have grown wealthy from advertisements of the mania, and from its pages may be best traced the whole careers

of the older companies. From a most interesting review of the work of S. SMILES' on *Railway Property*, in its issue of Feb. 10, 1849, p. 135, we can trace many important opinions which guided the policy of the paper with reference to finance, the paying quality of railways, the lightness, &c., of boilers, the size of locos., the frequency of trains, Adams' and Samuels' steam-carriage system and light trains.

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Another set, cloth, 14 vols., 1839-1851. £7

TEN MODERN VOLUMES (1869 to 1878), 35/

A Curious Journal.

1841 409 The *Railroad Monthly* [or Quarterly] *Journal* would be of interest if only for the light it throws on one of the most interesting minor characters of early railway history, Lieut. PETER LECOUNT, R.N. He evidently wished not to be known as editor, but correspondence was to be addressed to him, and whoever was its editor talked like Lecount's book, "swore" like a seasoned sailor at the gallant officer's enemy, Webb, and knew the London and Birmingham Railway *sanctum sanctorum* troubles off by heart. Its longest article was on RY. ACCIDENTS. Edward Bury the great locomotive maker, is here called the Locomotive Jockey (and something worse), and though I have not yet discovered when the gallant officer fell foul of his old line—the L. and B.—certain it is that even that "pattern" railway (like every other offender) got a long and sound drubbing in these pages. It is curious to note that cool references are made to the London and Birm., the Grand Junc., and the Croydon, and further on the Eastern Counties paying dividends out of capital. It must be the third railway journal, and is extremely rare.

Railroad Monthly Journal. Six of the Eight Numbers.

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1841

Weale's Quarterly Papers on Engineering.

1843-5 410 IN the first volume are Memoirs of WM. JESSOP, JAS. BRINDLEY, and WM. CHAPMAN, with beautiful little ports. And in the second Mallet's Report on DALKEY RY., Art. on Gill's PNEU. LOCOS., Sir J. Rennie on Holyhead and Port Dynllaen, Wood on Fuel in "Liv. and M." Locos, and Sir J. Macneill's Report on Atmos. Rys.

Weale's Quarterly Papers on Engineering. 2 vols. 4° hf. morocco. £3 3s

1843-5

THE ARTISAN.

1843-5 411 THIS paper commenced a New Series in 1843 with Vol I. and in it had a good review of French and Belgian Rys. and of the famous pamphlet on "Railway Reform" with which it agreed, in 1844 articles on Ry. Legislation and Atmospheric Rys. and in 1845 long reviews of Macd. Stephenson's Rept. on Indian Rys. and of Wilson's pamphlet on Gray, Articles on Webb's Colonnade Railways, on the Gauge Question etc.

The Artisan. Vols I. II. and III. New Series. 3 vols, 30/

1843-5

THE RAILWAY CHRONICLE.

1845-8 412 THIS representative of the Liverpool interests was founded in April 1844. It prided itself on its independence, and did not believe in personal paper battles. Though no railway paper in those days could afford to neglect the all important matter of shares and companies when advertisements at fancy prices were strewed broadcast, still it had frequent references and illustrations of mechanical inventions (including a great loco for the Glasgow Incline) and was a publication of a high class. The mania of course gave vivacity to its pages and it describes on one page a projected royal railroad between five of the Queen's palaces and being asked on the same page "Is there to be a railway crisis?" says "No a mania exists now but it is *not a railway mania*, it is only A PROSPECTUS MANIA"!!

Railway Chronicle. Vols from 1845 to 1848. 5 vols.

4° £2 10/

Mechanical Engineers' Proceedings.

1847 412a *THE Civil Engineers* and GEO. STEPHENSON were both proud, and so it came about that "the founder of the school of Modern Engineers" could not conveniently comply with the etiquette of the great C. E.'s Institute to become a member. Instead of which he favoured Birmingham by founding a *Society of Mechanical Engineers* here, and it was only about a fortnight before his death in 1848 that he read to them his paper on the Fallacy of the Rotatory Engine. According to a recent enquiry the Society's charge for a Set of the Proceedings to a non-member would be about £50 bound. The very fine set below is therefore an unusually cheap one.

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BARLOW'S PATENT JOURNAL.

1848-51 413 THE journal below illustrated and described patents in those days and many references will no doubt be found among the pages but it has not been possible to secure a complete set.

Patent Journal. By Chas. Barlow and E. J. Payne of the Patent Office, Chancery Lane. Vol V. 8° (May 27 to Sept. 30 1848 and 5 vols in 4° 1848 to 1851) 6 vols. 21/

1848-51

The Artisan.

1851-61 414 DURING the period covered by the volume below a very large number of important articles and notes on Railway Construction, Mechanism, etc., appeared in these papers, Mr. Zerah Colburn was a contributor on American Loco. Engineering, coal burning locomotives, etc., and in 1860 portraits of Robt. Stephenson, I. K. Brunel, and Jos. Locke appeared on the title page of the volume. Among matters referred to may be mentioned Adams on the Permanent Way, Samuel's Engines, Steep Gradient Locos., Beattie's Coal Burning Locos. (1857), Brakes, Ry. Carriages, Water Tube Boilers, East Lancas. Ry. saving £1,680 in 6 mos. by using coal for coke (1859), numerous references to the progress and construction of foreign and English railways. There is no index to the last volume, and I have found a page missing elsewhere. I believe it is otherwise complete, but it is impossible to guarantee it so.

The Artisan. 12 vols. 4° £4 4/

1851 to 1861

ENGINEERS' PROCEEDINGS.

- 1852-3** 415 **TAKING** the volume for 1852-3 as a specimen in it we find a memoir of the famous old Scotch railway engineer THOS. GRAINGER the maker of the "Monkland and Kirkintilloch" (the first edge railway in Scotland); another of JOHN SYLVESTER; an illustrated paper on the Creosoting of Timber, paper by D. K. CLARK on Locomotive Boilers. Taking the later volumes in 1876-7 there are among ABSTRACTS Raab's paper on Peat as fuel for locos, in 1878 M. Lestang describes Mallet's Locos with Compound Cylinders, in 1877 the papers on the Oldenburg narrow gauge railways, and steam traction on light railways, in 1879 paper on the Wylam Ry. bridge, and on a Polymeter for grading Rys.; and the volumes continue past the date of the ELECTRIC RAILWAY.

Proceedings of Inst. of Civil Engineers. Vol XLIX 1877 to CX. 1892. 62 vols and brief subject index to Vols LIX. to LXXXVI. Almost as new. £12 12/

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- 1866-93** 417 **THOUGH** we have not yet made the jump to a speed of 1000 miles an hour the leading engineering papers have had some exceedingly interesting events to chronicle for the railway world between 1866 and 1880 concerning the Mont Cenis and Mt Rigi Railways, the Larmenjat (one rail) Railway, the great Brake Trials, the New York Elevated Street Railway, etc., etc.

1873

TO

1880

Engineer; Jan. 1866 to March, 1893 first 43 vols in cloth, rem. in Nos. The lot £17 17/

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INDEX.

An Index will be published separately, price 1/-, should there be any demand for the same.

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ABBREVIATIONS, ETC., as follows are used in this Handbook:—8°=8vo. p8°, d8°, r8°, i8° for *post, demy, royal and imp. 8vo.* 2v=2 vols. Il.=*Illustrated.* bds.=*boards.* wr.=*wrappers.* N.D.=*not dated.* Ry.=*railway.* L. and M.=*London and Manchester Railway.* Rept.=*Report.* Op.=*Opened.* Gt.=*Great.* Eng.=*Engineer.*

THE WORD "*sup a*" is used to indicate that a further reference to a book occurs on some previous page of this Handbook; and "*infra*" to indicate a subsequent page.

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PUBLISHER'S NOTE.—PRICES.

Owing to an unexpected demand for many scarce little pamphlets and works I have been compelled to considerably raise my price in several cases to retain them for those completing large collections.

ERRATA.

WHISHAW has been spelt several times WISHAW. No. 202 (p. 57) should have been on p. 38; 203 (p. 68) on p. 57; and the headlines DESCRIP. of Co.'s (pp. 49-57) should be HISTORY of the Co.'s. No. 146 is 1841, 162A is 1854.

DATES.

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1834 "FIRE-FLY" speed 20	1854 Coal as Fuel
1837 Grand Junc. opened	1857 GT. NORTHERN'S REDPATH'S
1838 London and Birm. opened	Frauds
throughout	1859 Robt. Stephenson died
1839 "NORTH STAR" speed 39	1862 Steel Rails introduced
1839 Birm. and Derby opened	1867 Mt. Ceniz Ry.
1840 Mid. Counties [throughout]—	1868 Smoking Carriages
Rugby to Derby	1871 Mt. Rigi Ry.
1840 York and N. Mid. York to	1872 Third Class Passengers conveyed
Normanton	by Express Trains
1841 Gt. North of England [York and	1875 Gt. Trial of Brakes
Darl.]	1877-8 New York Elevated Street Rys.
1842 Queen uses railways	1881 Electric Ry. at Berlin
1843 Dalkey Atmospheric Railway	1893 <i>Daily News</i> reports possible
1844 Newcas. and Darl. opened	Electric Ry. travelling at 1,000
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The late Mr. Hyde Clarke.

While this Supplement has been passing through the Press, the death of Mr. HYDE CLARKE has been announced. He was connected with railways since 1836, and was at one time editor of *Herapath's Journal*. In writing to me on receipt of the *Handbook*, 19th Sept., 1893, he said: "I congratulate you on an enterprise which is calculated to be of great importance in providing the foundations for a history of railway enterprise." "My people were acquainted," he said, "with Smeaton, Trevithick, Fulton, Hornblower" He was a curious instance of a most able and influential, but latent developing force, and railway history is in need of his biography.—Vide also *The Engineer* for

. . . NOTES on the . . .
EARLIEST RAILWAY PUBLICATIONS
Mentioned in the HANDBOOK.

NOS. AND PAGES ARE REFERENCES TO HANDBOOK.

FIRST PERIOD—Before 1800.

(Including the CUGNOT and MURDOCH Period.)

I have in the Handbook inserted three items for this period, **Chorographia** (No. 51) for its historical connection with the first seat of English railways or tramways; **Bramah's Letter** (No. 272), for its connection with the inventor of the first steam carriage expressly built for passengers; and the **Repertory of Arts** (No. 395) as the only place of record to find the earliest patented devices for locomotion—the first volume commencing 1794, and continuing to recent times. No contemporary records of MURDOCH or CUGNOT are yet to hand.

SECOND PERIOD—1801 to 1809.

(Including the TREVITHICK Period.)

The half-dozen items for this period include **Anderson** (No. 1) as the first suggester of a system of railways; **Young** (No. 52) for his advocacy of iron rails for quick travelling; the original **Plan of the Kilmarnock and Troon Railway** (now part of the Glasgow and South-Western Railway) (No. 122A) as a memento of the oldest passenger locomotive railway in Scotland—a railway which sent to GEORGE STEPHENSON for a locomotive long before the Stockton and Darlington line; the curious **Gloucester and Cheltenham Medal**, with its ancient Stephenson locomotive (No. 122B); and two records of the canal system before railways became feared. TREVITHICK'S locomotive was running in 1802, but I have not publicly offered for sale any contemporary record of it.

THIRD PERIOD—1810 to 1824.

(The BLENKINSOPP and STEPHENSON period.)

The great Plate lines were now well in evidence (see *Handbook* pp. 30-31). BLENKINSOPP'S locomotive (No. 165A) ran in 1802; STEPHENSON'S first in 1813. **Gray** published the first edition of his *Observations* in 1820 (for edition of 1822 see No. 165); **MEDHURST** made the first suggestion for an Atmospheric Railway, 1812 (No. 258); **Steam Vessels** (see page 101) appeared on our rivers; the first works on **Steam Engines** began to appear (p. 86); various **Mechanics' Magazines** started, now invaluable records of this period (p. 122); **SMEATON** published his famous **Reports** (No. 273); **ROGER NORTH** wrote his extraordinary

* * * **TITLE INDEX** * * *

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 ——— his "ingenious toys," 1022
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 ——— Railway, 167
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YORK AND NORTH-MID-
 land Prices, 28

Earliest Railway Records.

(Arranged according to date.)

THE GREAT RAIL QUESTION.

1821

- 420 Longridge, M. SPECIFICATION of JOHN BIRKENSHAW'S PATENT for an Improvement in the Construction of MALLEABLE IRON RAILS, to be used in Rail Roads, with Remarks on the Comparative Merits of CAST IRON and MALLEABLE IRON RAILWAYS, 12pp., and folding plates in which the train is drawn by a horse, THE VERY RARE FIRST EDITION, 21s (Walker) Newcastle, 1821
This edition does not include the correspondence.
 NICHOLAS WOOD refers to the famous rails in his work on RAILROADS, 1825 (pp. 61-2), and Smiles in his life of Geo. Stephenson, small edition, 1860 (p. 132)

- 421 ——— SPECIFICATION of JOHN BIRKENSHAW'S PATENT for MALLEABLE IRON RAILS, with Remarks on the Comparative Merits, etc., 14pp., with the Chapman-Birkenshaw Correspondence, 8pp., and the folding plate in which the train is drawn by Stephenson's Eng., 2ND ED., 10s (Walker), Newcas., 1824
 422 ——— 1827 EDITION, with Introduction. The "Remarks," the Correspondence, the Specification, 22pp., Account of Stockton and Darling. Railway, etc., 39pp., and Adamson on Railroads, 26pp., with 2 views of Bedlington Works, views at opening of Stockton and Darl. Railway, 7s6d
 423 ——— 1838 EDITION, without Adamson's Treatise, but with an Abstract of Booth's Account of Liverpool and Manchester Railway, of the Great Contest, a short eulogy of Locomotives, with view of the Longridge Locomotive, etc., 10s6d

THE GREAT PIONEER GRAY.

- 1823 424 Gray, Thos. OBSERVATION on a GENERAL IRON RAILWAY, 4th edition, 40s, with plates, including *Blenkinsopp's Locomotive*. 1823

With bookplate of H. A. Fletcher. A note within says: BLENKINSOPP'S Engine began running on the Railway from MIDDLETON COLLIERY to LEEDS (3½ miles) on 12th Aug., 1812, and considers GRAY'S 'General views resemble greatly those put forth by RICHARD LOVELL EDGEWORTH, and quoted in an earlier part of this work. Since his death QUEEN VICTORIA granted pension (sic) to his Widow.'

PALMER'S SUSPENSION RAILWAY.

- 425 Palmer's DESCRIPTION of a RAILWAY on a New Principle, with two folding plates, 60pp., 8vo, 10s6d 1823

CUMMING.

- 426 Cumming, T. G. ILLUSTRATIONS of the ORIGIN and PROGRESS of RAIL and TRAM ROADS and STEAM CARRIAGES, or LOCOMOTIVE ENGINES, also . . . particulars . . . of the principal railways . . . particularly those projected between Liverpool and Birmingham, and Liverpool and Manchester, with a view to the more general employment of . . . Locomotive Engines for the Conveyance of Passengers as well as Merchandise . . . 64pp., 8vo, wrappers, 42s Denbigh, 1824

I consider this brochure the most important of all the early publications for the promotion of a railway system, and, with only about one exception, it is the rarest.

"SCOTSMAN" ARTICLES.

- 1825 Maclaren's "Scotsman" Articles on Railways (see *Mechanics' Magazine*, Vol III.) 1825

THE GREAT BILL BEFORE THE LORDS.

- 427 Liverpool and Manchester Railway Bill EVIDENCE BEFORE the LORDS' COMMITTEE, 322pp., folio, half calf, VERY SCARCE, 21s 1826

GEO RENNIE, CHAS. VIGNOLES, JOSIAH JESSOP, JAS. WOODS, and JOHN GLADSTONE (father of our former Prime Minister) give Evidence. The formidable ALDERSON is again the opposing Counsel. ALEXANDER NIMMO and JOSEPH JESSOP saw no difficulty in running a railway over Chat Moss, "nor any other Moss," which is interesting in view of Mr SMILES' enthusiasm.

EARLIEST LOCOMOTIVE LITERATURE.

- 1828 428 Rankine, David. The EFFECTS of FORCE APPLIED to DRAUGHT, with illustrations . . . of the performance of Horses and Locomotive Engines on Railways, 76pp., with plate, 8vo, bds., Glasgow, 10s6d, 1828
Very rare, as is everything of this date concerning locomotives, it mentions the KILLINGWORTH RAILWAY and ROBISON (the first suggester of a locomotive to WATT), and is of special interest as being published at GLASGOW.

THE GREAT LOCOMOTIVE VICTORY.**(Locomotive versus Stationary Engine.)**

- 1830 429 Stephenson and Locke. OBSERVATIONS on the COMPARATIVE MERITS of LOCOMOTIVE and FIXED ENGINES . . with an Account of the COMPETITION . . . at RAINHILL, 83pp. Liverpool, 1830
This is the famous reply of Stephenson and Locke to the appalling suggestion to work the all-important Liverpool and Manchester railway by fixed engines. The great Locomotive Contest had taken place, the victory was won, but, nevertheless, it was still important for the locomotive cock to crow.

**STEPHENSON ON THE GREAT RAINHILL CONTEST.
 ("Rocket" versus "Novelty," etc.)**

- 430 Robert Stephenson's ACCOUNT of the GREAT CONTEST:—STEPHENSON (Robt.) and LOCKE (Joseph) OBSERVATIONS ON . . . LOCOMOTIVE AND FIXED ENGINES, WITH AN ACCOUNT OF THE COMPETITION OF LOCOMOTIVES AT RAINHILL . . . 83pp., royal 8vo, wrappers, VERY RARE, £2 2s [1830]

The first part is an answer "at the darkest hour of the locomotive" to the report of the two best practical engineers of the day (Walker and Rastrick) against the use of locomotives on the Liverpool and Manchester line; and the second part is the most important published account of the great Locomotive Contest.

EARLY SCOTCH PROJECT (Edinburgh to Glasgow).

- 431 Edinburgh to Glasgow. Grainger, Thos., and Miller, John. OBSERVATIONS ON THE FORMATION OF A RAILWAY Communication between . . . EDINBURGH and GLASGOW, 10 and 4pp., and folding map, 4to, original wrappers, 30s Edin., 1830

This proposal was made the year after the success of locomotives had been decided at Liverpool. It was the first project with a chance of success, the one of 1825 having been decidedly premature. The Committee were A. Spiers (Elderslie); W. Hussey (Newhall); M. Sprot (Garnkirk); C. Tennant (St. Rollox); J. Lang (Broomhill).

(L. & N.W.R.) LIVERPOOL AND MANCHESTER RAILWAY.

1831

- 432 Kirwan, Joseph. Descriptive and Historical Account of the LIVERPOOL AND MANCHESTER RAILWAY. 32pp., with illustration of the William IV. locomotive, 7s6d McPhun, Glasgow, 1831

This is taken mostly from the MECHANICS' MAGAZINE, but has extra matter, besides a fuller account of Ericsson's "WILLIAM IV." locomotive than in the part of that magazine offered for sale herein.

[L. & N.W.R.] OBJECTIONS TO RAILWAY BETWEEN LONDON AND BIRMINGHAM.

- 433 London and Birmingham Railway. *Remarks on the Proposed Railway between BIRMINGHAM AND LONDON*, proving by facts and arguments that that work would cost SEVEN MILLIONS AND A HALF, that it would be a burden upon the trade of the country, and would never pay. By INVESTIGATOR, 116pp., 8vo, wrappers, VERY RARE, £2 2s (Richardson) 1831

Clever, trenchant, and convincing, with no little dry humour, worthy of the QUARTERLY REVIEW of old. This is the first of the sort to hand for over 18 months, and far the most important. It is enough to convince anyone that a railway between London and Birmingham could not pay. It is probably the best early diatribe against railways still extant. And all original protests of the kind are very scarce.

- 434 Capper, C. H. (Engineer). OBSERVATIONS ON "INVESTIGATOR'S" PAMPHLET RELATIVE TO RAILWAYS, 28pp., p8vo, 10s6d (Longman) London, 1831

Stoutly denied "INVESTIGATOR'S" figures; Contest had shown what locomotives could do; the Liverpool Railway Shares were at premium; line had not exceeded Treasurer's estimate—and, if expensive, on them (the L. and M. Co.) had devolved the task of MAKING EXPERIMENTS FOR THE REST OF THE WORLD. The London line must cost less, and no one who had ever seen the rapidity and comforts of the Liverpool Railway could ever doubt that a London line will be completed.

BRADSHAW GIVES LENGTHS OF RAILWAYS.

- 435 Lengths and Levels to BRADSHAW'S MAPS OF CANALS, NAVIGABLE RIVERS AND CANALS, 35pp., 5s 1832

1832

A very accurate work. Of great interest if only as showing how the railways at this time were merely a part of the Great Canal System. Everything was then for goods and slow speeds.

EARLY PROPOSED DEVON RAILWAY.

- 1836 436 Bideford and Okehampton Railway. Original Prospectus, *with map* (Hopkins and Sons, Engineers), 4pp., folio. 10s6d 1833
Capital, £87,000. Directors: Woolcombe (High Sheriff), Fellowes (M.P.), Preston, Johnson, etc. Proposed locomotive railway for goods and passengers, claimed as a national, not a local measure. Estimated receipts, £4,598 from Lime; £4,137 from Coal; £2,770 from Culm; £2,475 from Passengers; out of total of £17,395. There were to be five Locomotives at £700 each; extensions also proposed from Winkleigh to Exeter, and from Bridestone (near Okehampton) to Plymouth.

North-Eastern Railway (STOCKTON & DARLINGTON).

- 1834 437 Guide to CROFT, DARLINGTON, etc., with a detailed account of the STOCKTON AND DARLINGTON RAILWAY, 105pp., cr. 8vo, 7s6d Darlington, 1834
Contains an unusually good account of the opening, description of line, etc.

THE GREAT SUNDAY QUESTION.

- 438 Sunday Railway Travelling, by "A Railway Director," 1836, 3s6d

SOUTH-EASTERN RAILWAY.

- 1836 439 Report and Proceedings of the FIRST GENERAL MEETING OF SOUTH-EASTERN (London and Dover) RAILWAY, 28pp. (Signed P. St. L. Grenfell, Chairman; Edmund Halswell, Deputy-Chairman), 8vo, *pink wrappers*, 10s6d 1836
History of Act, choice of course, connection with Brighton-line. Term London and Dover still part of title.

GREAT-EASTERN RAILWAY.

- 440 Thames HAVEN DOCK AND RAILWAY, incorporated by Act of Parliament, with Observations on their Anticipated Advantages, 44pp., 8vo, *with map*, 7s6d (Lewis), London, 1836
This was, I believe, the first Branch of the Eastern Counties (now Great Eastern) Railway, and is shown in the map of the first Bradshaws.

IRELAND.

- 441 Burgoyne's LETTER to O'CONNELL on DUBLIN STEAM PACKET Co.'s BILL, with Report of Commissioners on the Shannon, 16pp., cr. 8vo, 7s6d
 London, 1836

- 1837 442 Walker, John, C.E. TWO LETTERS TO MATHEW BARRINGTON, with map, 16pp., cr. 8vo, 7s6d
London, 1837

Time of the Royal Commission.

FRANCE IN 1839.

- 1838 443 Carte ROUTIERE DE FRANCE, 1839, about 28 by 24 in., folded, 3s6d

This map professes to mark the "CHEMINS DE FER," and they are observable in the Netherlands, but neither the ST. GERMAIN nor the ORLEANS lines appear to have been considered worth indicating.

[L. & N.W.R.] MANCHESTER AND BIRMINGHAM RAILWAY.

- 1839 444 Correspondence between the Manchester and Birmingham and Grand Junction Ry. Cos., 1st October, 1838, to 11th January, 1839, 58pp., 7s6d 1839

A part of the very curious history of the "Juggling of the Potteries." Explains the reason for the dotted trunk line on the Maps in the first Bradshaw's.

[NORTH BRITISH RAILWAY] AN OLD BRANCH.

- 445 Neill, Dr. Remarks on the Progress and Prospects of the EDINBURGH, LEITH, and NEWHAVEN RAILWAY, with an Appendix of Documents, 36pp., 8vo, sewn, 10s
Edinburgh, 1839

Salt, in his Railway Information (1850) calls this the Oldest Railway in Scotland, and quotes from the RAILWAY CHRONICLE, 20 May, 1848, an account of its projection in 1834-5, its sanction in 1836, and operations in 1839.

The Guides.

[Arranged alphabetical under headings of the Modern Companies.]

GLASGOW AND SOUTH-WESTERN SYSTEM.

- 446 Warden, John. MORRISON'S GUIDE to G. and A. Railway; or GLASGOW AND AYR and GLASGOW AND GREENOCK RAILWAY COMPANION, containing a description of the Railroads, etc., 134pp., 12mo, cloth, 10s6d (Morrison), Glasgow, 1841

Locomotives are quaintly spoken of. We read of "the Hissing Monster," impressing and delighting the passengers by making the train sweep along with an ornithological rapidity! The frontispiece shows the Glasgow Station.

GREAT-EASTERN RAILWAY.

- 448 Measom's Illustrated Guide to the GREAT-EASTERN RAILWAY (Cambridge Line), 401pp., maps, advertisements, and copious illustrations, 5s 1865

This again illustrates as far as CAMBRIDGE, one of the oldest English Railway routes. It is the old "Northern and Eastern" shown in the maps of the first "Bradshaw."

- 447 **Measom's ILLUSTRATED GUIDE** to the GREAT-EASTERN RAILWAY (*Colchester Line*), 438pp., with advertisements, two maps, and *copious illustrations*, 5s 1865

SIR GEO. MEASOM, from whom we had the pleasure of hearing on the production of our "*Handbook*," furnishes here a very attractive pictorial and descriptive guide, and as the G.E.R. is the North Continental line he shows us the sights of the NETHERLANDS. Specially interesting as a well-illustrated guide to the route of the famous White Elephant Railway.

GREAT-NORTHERN RAILWAY.

- 449 **Measom's ILLUSTRATED GUIDE** to GREAT-NORTHERN RAILWAY, with map and numerous *illustrations*, 200pp., and 190pp. advertisements, 5s 1857

List of Officers. The "*Measomian*" hint that "*neither smoking or dogs are allowed*" is duly inserted. The woodcut illustrations of the "*Great Northern*" towns of this date are well worth attention.

GREAT-WESTERN RAILWAY SYSTEM.

[G.W.R.] Early Excursionists' Guide Book.

- 450 **Lundie, R. S.** Railway Excursionists' Handbook to WINDSOR and ETON, with woodcuts and wrapper, illustrated with railway signalmen, tunnel, bridges, locomotives, etc., 51pp., 12mo, VERY RARE, 7s6d 1851

Preface states of EXCURSION TRAINS that the merit of originating this novelty belongs to the BRIGHTON Railway Company. This railway guide is perhaps unique in not connecting itself with any specified railway.

G.W.R.

- 451 **Measom's Guide** to the GREAT-WESTERN RAILWAY, including the Old Worcester and Wolverhampton, Chester and Holyhead Line, and Isle of Man, *copiously illustrated*, 872pp., 5s6d Circa. 1860

GREAT-WESTERN RAILWAY.

- 452 **Measom's ILLUSTRATED GUIDE** to the GREAT-WESTERN RAILWAY, with *fifty illustrations*, FIRST EDITION, 64pp., 8vo, cloth, 10s6d [1852]

A very scarce edition, nice little views of the railway Stations of that date, with valuable sketches of the trains, locomotives, etc., together with a short historical introduction.

IRISH RAILWAYS (EARLY).

- 453 **Irish Railway Charts.** GREAT-SOUTHERN AND WESTERN RAILWAY—(a) Dublin to Cork and Queenstown; (b) Dublin to Tipperary and Limerick—2 parts, folded into post 8vo, *original illustrated green wrappers*, 10s [Circa. 1849]

454 **Irish Ry. Charts.** Dublin to Tipperary part only, 5s

455 ———— Dublin to Killarney, 5s

Long folding charts in RAILWAY CHRONICLE style, the main line and its bridges and viaducts in the centre, with mileage marks and illustrated itinerary by the sides, surmounted by a brief historical sketch of line.

456 **Midland.—Great-Western Railway.** Western Highlands, Connemara. Opinions of the Press. 52pp., with fares from English Stations. 8vo, wrapper, with printed map of course of the railway, 5s [Circa. 1848]

A unique and by no means a bad type of railway Guide, the district being described by quotations from the daily press.

THE LONDON & NORTH-WESTERN RAILWAY SYSTEM. (Chester and Holyhead.)

457 **Parry, Edward.** RAILWAY COMPANION from CHESTER TO HOLYHEAD, including a narrative of the Early and Parliamentary History of the project, account of the Conway and Britannia Bridges, FIRST EDITION, 18mo, 154pp. and advertisements, 7s6d 1848

458 ——— SECOND EDITION, 153pp., and advts., 5s6d 1849

The C. and H. Railway was surveyed by Geo. Stephenson, and made by his son. An admirer, RAILWAY TIMES (Aug. 3, 1850), alluded to it as "an Imperial Line," where "Chairman, Directors, and Engineers triumphed over the greatest difficulties ever surmounted by human skill."

(L. & N.W.R.) GRAND JUNCTION.

459 **Cornish.** GRAND JUNCTION and LIVERPOOL AND MANCHESTER Railway Companion, Second Edition, 172pp., 18mo, 5s 1837

(L.&N.W.R.) LIVERPOOL AND MANCHESTER RAILWAY.

460 **Panorama** of MANCHESTER and RAILWAY COMPANION, with 10 copperplates, maps, plans, etc., 258pp., cr. 8vo, cloth, 7s6d (Everett), MANCHESTER, 1834

Devotes twenty-four pages to the LIVERPOOL and MANCHESTER RAILWAY, with a short description of contest and four copper plate views (same subjects as the famous "COLOURED VIEWS," and a list of the first 33 locomotives of the line, with particulars as to Axle, Cylinder, Stroke, and Maker.

(L. & N.W.R.) LONDON AND BIRMINGHAM RAILWAY.

- 461 **London and Birmingham Railway.** A HANDBOOK FOR TRAVELLERS along the London and Birmingham Railway, with Fares and Time Tables, with portions extracted from Roscoe, *with 25 woodcuts, and map.* 146pp., 18mo, cloth, 5s [Circa. 1840]

P. 129 describes first-class trains, and mixed trains, and the first, second, and third class day carriages and night carriages, and the passengers' note book (to register grumbles).

[L. & N.W.R.] LONDON AND BIRMINGHAM RAILWAY

- 462 **Moggs' BIRMINGHAM RAILWAY** (and Birmingham, Coventry, Warwick, and Leamington) GUIDE, including Stratford-upon-Avon, *with a London and Birmingham Railway Map and the Railway Time (and Fare) Table, corrected to 1 July, 1842,* 18mo, yellow wrappers, 7s6d 1842

Moggs was Editor of "PATERSON'S ROADS." All his Railway Guides are scarce.

[L. & N.W.R.] NORTH UNION RAILWAY.

- 463 **North Union Railway.** 44pp., 12mo (title missing). Printed by Wilcockson and Dobson, Printers, Preston, VERY RARE. 7s6d

A good little "Guide," including a History of the line (Vignoles, Eng.), and an Account of its opening with a train drawn by the No. 2 Engine, made by Jones, Turner, and Evans, of the Viaduct Foundry, Newton. This line is now leased to L. and N.W.R.

L. & N.W.R.

- 464 **Cassell's OFFICIAL GUIDE** to London and North-Western Railway, 380pp., *illustrated*, 1s3d, post free 1885

LONDON AND SOUTH-WESTERN RAILWAY.

- 465 [**South-Western Railway.**] The Channel Islands . . . [with] a Complete South-Western Railway Guide, *with a map and chart*, by a Twenty Years' Resident, 112pp., cr. 8vo, cloth, 5s 1841

References to railway brief but of historic interest, passengers are "shown" to carriages, 2nd, class is opened at sides, there are first class trains, mixed trains, and goods trains for passengers each with its own speed and fare.

NORTH BRITISH RAILWAY.

- 468 **Fraers' COMPANION** for EDINBURGH and GLASGOW RAILWAY, 4pp., folio, *with plans of Edinburgh and Glasgow, maps of line, time and fare tables* (folded into neat 24mo case). An interesting relic of "*Auld Lang Syne*," 10s6d Circa 1842

"The fare by luggage train is only 2s6d."

LONDON, BRIGHTON, and SOUTH COAST (As it was in 1845.)

- 466 **Railway CHRONICLE TRAVELLING CHART** of the BRIGHTON RY. (folded into 8vo), RARE, 10s6d (Circa) 1845

One of the rarest and most interesting of the well known "Charts." Gives a brief historical sketch, a list of SIGNALS, views of interior of London Bridge Terminus, and interior, with its old engines, of the historic junction of the Greenwich and Croydon with Bricklayers Arms branch hard by, an elaborate Atmospheric Engine house, the Redhill Junction, the old Brighton terminus, and numerous other woodcuts.

MIDLAND RAILWAY.

- 467 **Black's IRON HIGHWAY** (No. 2) from London to Edinburgh, a descriptive guide to the Railway lines between these cities, *with maps, charts, and HINTS to RAILWAY TRAVELLERS*, 59pp., 12mo, 5s Edin., 1850

Before the days of Smoking Carriages, and when guide writers still treated the travelling public to such hints as "Get your Tickets," and "Take your Seats," "Don't leave the carriage without the knowledge of the conductor," and many other quaint warnings.

NORTH BRITISH RAILWAY.

- 469 **Welford, Richard.** HANDBOOK to the WAVERLEY ROUTE of the North British Railway . . . between Edinburgh and Carlisle and Edinburgh and Hexham, *numerous illustrations*, 86pp., cr. 8vo, *wrappers*, 5s (Circa 1863)

A well written Guide to the Scott District. On p. 52, the histories of the Border Counties Railway, and of the Carlisle, Langholm, and Hawick Railway.

SOUTH-EASTERN SYSTEM.

- 470 **London and Greenwich Railway Guide**, 8pp., *with frontispiece*, 12mo, *wrappers*, 7s6d Mansell, 1836

SOUTH-EASTERN RAILWAY.

- 471 **Measom's ILLUSTRATED GUIDE** to the South-Eastern, including the NORTH-KENT and GREENWICH LINES. *with 200 illustrations and map*, 164pp., and also advertisements, 5s6d Circa. 1858
Goes also to Paris along the Northern of France.

THE NORTHERN RAILWAYS.

- 474 **Sharpe's ROAD BOOK** for the RAIL, Eastern Division, including the lines North of the Mersey, and comprising Lancashire and Yorkshire, Midland, Great Northern, Caledonian, North British, North Eastern, Eastern Counties, 108pp., cr. 8vo, *limp cloth*, 5s (Bogue), 1855

NORTH-BRITISH & GLASGOW & SOUTH-WESTERN.

- 472 **Lizar's** Guide to EDINBURGH, GLASGOW, PAISLEY, GREENOCK, and AYR RAILWAYS, with Time-Tables, pretty steel plates, map, etc., 42pp., 12mo, VERY RARE, 10s [1842]

On the GLASGOW AND AYR Railway no passengers carried by any of the LUGGAGE TRAINS. On the Edinburgh and Glasgow the one luggage train left each end at 6 a.m.

I see from one of BRADSHAW'S RAILWAY COMPANIONS for 1842, that the time table in above issue corresponds to the time tables of the first year of the Edinburgh and Glasgow line.

NORTH-EASTERN AND SCOTLAND.

- 473 **Measom's** Official Illustrated Guide to the North-Eastern, North-British, Edinburgh and Glasgow, Scottish Central; Edinburgh, Perth and Dundee; Scottish North-Eastern, and Great North of Scotland Railways, 448pp., and 233pp. advertisements of date, cr. 8vo, original pictorial wrappers, 5s 1861

Briefly this is a guide to the NORTH-EASTERN RAILWAY district of England and all Scotland. It describes the five towns from York to Inverness, it penetrates west to the pretty wooded retreats of the Gareloch, it enters the great commercial houses of Glasgow and Newcastle, and at Edinburgh discovers a curious little Tank Locomotive at TENNANT'S. All copiously illustrated.

The Political History of Railways.

(Nationalization, etc.)

- For first suggestions of NATIONALIZATION, see MUDGE (Handbook, page 3.)
 For NATIONALISATION of IRISH RAILWAYS, see also *Railway Times*, 1837: *Quarterly Review*, January, 1839, all in favour; and *Railway Magazine* (4to Series), 1839 (p. 182).
 For Works by HUDSON and STICKNEY, see under "America."
 For first movements for Government Control, see MORRISON.
 For advocacy of lower fares and rates, see GALT.
 For Criticism of MORRISON, "Cato of Cornhill," see *Railway Chronicle*, November 28th, 1846; also the *Observations on Strutt's Bill*.

Nationalization of Railways

Considered for Ireland, 1837.

- 1837 Irish Railway Commission, *First Report*, 1837

* * *

The Second Report, 1838, decided for railways in Ireland, if not by private, then by State enterprise. (See REPORT, *Handbook*, p. 40, and the capital ATLAS, p. 49)

* * *

IRISH RAILWAYS were a subject of the day on the appearance of the first weekly *Railway Press* (see RAILWAY TIMES, *Handbook*, p. 125)

* * *

The poor KILKENNY RAILWAY represented Irish private railway enterprise. For a Shareholder's protest against State lines, see Letter to Lansdowne, (*Handbook*, p. 39)

MR. BERMINGHAM first strongly deprecated State Railways. The word "advocated," in speaking of his "First Report" (*Handbook*, p. 40), was used in error. This Report gives list of private projects.

* * *

1839 LORD MORPETH (First Victorian Irish Secretary) introduced a Government Bill for a loan of £2,500,000. The *Railway Times* strongly supported. Later on the Bill was dropped by what the R.T. designated "a flagrant dereliction of duty by incapable imbeciles!" (p. 501)

* * *

PIM (Treasurer of Dublin and Kingstown Railway) had by now become in favour of State lines, and hence results.

475 PIM'S LETTER TO SHAW, 16pp., cr. 8vo, 7s6d 1839

* * *

By 1841 MR. BERMINGHAM also favoured State lines, and with his *Statistical Evidence* (*Handbook*, p. 41) he praised LORD MORPETH, and collected all evidence in favour of State Railways.*

The Engineering History of Railways. (History of Construction.)

OBLIQUE ARCHES.

476 Buck, G. W. Essay on OBLIQUE ARCHES, 44pp., 12 plates, 4to, cloth, 5s 1839

STEPHENSON AND THE BRITANNIA BRIDGE.

(The first Millionaire Engineer's most anxious work.)

477 Clark, Latimer. General Description of the Britannia and Conway Tubular Bridges, illustrated, 40pp., List of Subscribers and map, 7th Edition, original wrappers, 5s 1850

* And also included a Plan for Avoiding Railway Collisions, and a note on PARKINS' famous Letter to GLYN.

HISTORY.

- 478 [Clarke, R. Yorke.] THE RAIL, Its ORIGIN and PROGRESS, with Illustrations, Anecdotes, and Engravings, by "PETER PROGRESS THE YOUNGER," 60pp., 18mo, 7s6d 1847

DAY on PERMANENT WAY.

- 479 Day, James. CONSTRUCTION and FORMATION of RAILROADS, 210pp., FIRST EDITION, 3s 1839
On p. 111-112 is a reference to the famous TIMBER BRIDGES made by the Messrs. GREEN, about which we have a special MONOGRAPH [see GREEN].

ENGINEER'S PLAN.

- 480 Great Western Railway. Engineers' Diagram of Cuttings and Embankments widening between HAYES and WEST DRAYTON, 1s6d

TIMBER BRIDGES.

- 481 Green. TIMBER VIADUCTS of Newcastle and N. Shields Railway, read before Brit. Assoc. by J. and B. GREEN, Aug., 1838, *with tinted illustrations of OUSE BURN and WILLINGTON DEAN VIADUCTS*, 12pp., 4to, *wrappers* 10s6d Newcastle, 1839
Here £14,000 is claimed as being saved by wooden instead of stone arches.

BRITANNIA BRIDGE AGAIN.

- 482 Jackson, Thos. The Tourist's GUIDE to BRITANNIA BRIDGE . . . also an Account of the CONWAY BRIDGE, the Grand MENAI SUSPENSION BRIDGE . . . etc., 10th Edition, 46pp., *original wrappers*, 6s6d 1852
The Britannia Bridge cost £600,000, and the iron-work alone £375,000 ; double what it would cost now.
 JEAFFRESON.

CURVES.

- 483 Livingston, D. RAILWAY CURVES, 147pp., cr. 8vo, 1s9d (Spon) 1893

LIGHT RAILWAYS.

History of the Battle of the Gauges.

- 486 Report of the GAUGE COMMISSIONERS. 818pp. *folio*, 30s 1846,
The evidence as given in Mr. Sidney's "GAUGE EVIDENCE" (Handbook p. 24) is here in full detail. It is all the more interesting now the battle of the gauges is being renewed.

COLONIAL RAILWAYS.

- 487 **Reports, etc.** Blue Book in Copies or Extracts of Correspondence on Construction of Railways in CEYLON, TRINIDAD, BRITISH GUIANA, and NEW BRUNSWICK, 159pp., four maps, folio, 10s6d 1847

LIGHT RAILWAYS.

- 488 **Spooner, C. E.** NARROW-GAUGE RAILWAYS, 128pp., many plates, 8vo, cloth, 6s6d
With full description of the famous FESTINIOG line, with average gradient 1 in 92, and gauge of 2ft. (i.e., less than difference in width between the wide and narrow gauge formerly on G.W.R. It is the old Portmadoc line of 1832, and the great PIONEER LIGHT RAILWAY. On page 69 these railways are estimated to cost £9,000 per mile, and pay 6 per cent., as against £15,000 and 3½ per cent. for ordinary gauge.

SIGNALS.

- 489 **Tyers' Patent** SIGNALLING BLOCK TELEGRAPHS, with illustrations and plans, 96pp., cr. 8vo, cloth, 2s6d 1872
Has an interesting historical introduction on Tyers' Patents. The Telegraphs are used on North-Western, Great-Eastern, Brighton, etc.

SUBMARINE LINE (ENGLAND TO FRANCE).

- 490 **Walker, Wm. T.** On the Construction of a RAILWAY across the CHANNEL BENEATH THE SEA, between . . . England and France, 37pp., 8vo, wrappers, 5s 1870
In the folding map and plan one line is shown deep down in the grey chalk from the South Foreland to about 2 miles south of Calais; another line through a tube between Shakespeare's Cliff and the South of Cape Gris-Nez.

References.

ACCIDENTS.—Chadwick *Papers Statis. Society* (Handbook, page 7, No. 20) said 30 per cent. of them could have been prevented by the telegraph.

CHATMOSS.

- "Impossible to carry a railway over it."—Giles.
 A GREAT DIFFICULTY TO OVERCOME.—See Smiles' *Life of Stephenson*; Francis' *History of Railways*. JAMES got nearly drowned in it.
 A FERRIBLE PLACE.—"A swampy Syrtis that almost resembled that Serbomian bog in Dalmatia that swallowed up whole armies."—Devey *Life of Locke*.
 NO DIFFICULTY AT ALL.—NIMMO before Lords' Committee, 1826.
 RIDICULOUS TO CALL IT IMPRACTICABLE.—Rennie *Autobiography*.
 "Impossible if traversed on an embankment."—See Vignoles' *Life*.

Magazines.—See under separate heading.

PAPER RAILWAYS in Russia.—See *Hazell's Annual*, 1886.

PERMANENT WAY.—See *Mahan* under "American Railways."

PILES.—Mr. WOOD declared “the whole stability or superiority of the G.W.R. over other wooden railways depends upon THE RETAINING POWER OF THE PILES, which piles, remarked the *Railway Times* (Sept. 8th, 1838, page 504), within a short month after the publication of this opinion, were abandoned as the worst feature of the whole affair.

SIGNALS.—See PARSLÖF *Our Railways*, 1878, page 69.

History of Telegraphs.

OLD TELEGRAPHS.

- 484 Macdonald, John. TELEGRAPHIC COMMUNICATIONS: Naval, Military, and Political . . . 186pp., 8vo, boards, 15s 1808

Colonel MACDONALD suggested in 1808 a new “Naval, Military, and Political” Telegraphic System, substituting a speaking in lieu of a spelling power. In the work above he explains and illustrates his system, and criticises that then in vogue.

TELEGRAPHS,

History of Telegraphs.

- 484A Highton, Ed. ELECTRIC TELEGRAPH: its history and progress, numerous illus., 179p., 12mo, cloth, gilt edges. 10s6d 1852

Peculiar features in the different telegraphs. Mentions 34 authorities.

Submarine Cables.

- 485 Preece, W. H. On the Maintenance and Durability of SUBMARINE CABLES in SHALLOW WATER (from Civ. Eng. Proceed., with abstract of discussion on the paper), 82pp., 6s 1862

Management

OF THE BRISTOL AND EXETER.

- 492 Bristol and Exeter Railway. General Regulations for Traffic Department and for Engine-Drivers and Firemen; with Code of Signals, 12th May, 1869, 141pp., 12mo, 3s6d

p. 68, Drivers and guards not to place independent reliance on the electric telegraph.

COTSWORTH'S RAILWAY CALCULATORS.

MR. COTSWORTH has forwarded me a supply of his CALCULATORS, now used in so many railway offices. Mr. C. tells me he was formerly strongly opposed to their introduction, and prided himself on his personal calculating powers. But, being beaten by a mechanical process, took that process in hand, improved it, and introduced it throughout the country

- 493 The prices of the best CALCULATOR is 10s6d, others down to 2s6d (particulars on application)

OLD EASTERN UNION SIGNALS.

- 494 **Eastern-Union Railway Signals and Regulations**, July 31st, 1848, 61pp. and Index, 3s6d

RATES FOR BRANCH LINES AS FEEDERS.

- 495 **Fisher, J.** OBSERVATIONS ON JUDGMENT of 18th February, in Queen's Bench: *REGINA versus S.E.R.*, with the Case and Judgment, 33pp., 8vo, *sewn*, 10s6d 1854

Throws a curious light on the contemporary railway history. The S.E.R. bound themselves to pay a ridiculous rent for the barren Reading branch. Dorking overseers rated pro. rata. This being disallowed, D. claimed extra rates, because of the branch being a FEEDER to main line, and won the day.
(See also HERAPATH'S JOURNAL, 1854, p. 390-1.)

BRIGHTON COMPANY OLD REGULATIONS.

- 496 **London, Brighton and South Coast Railway Laws, Rules and Regulations for Officers and Servants**, 1st January, 1857, 164pp., 12mo, 5s

"On no account must stop signals be neglected through any dependence upon the Electric Telegraph." p. 2.

RAILWAY LABOURERS AS WILD BEASTS.

The Whole Truth.

- 497 **Papers** read before Statistical Society, Manchester, on DEMORALISATION and INJURIES . . . of RAILWAY LABOURERS, viz., by John Robertson, Robert Robinson, and Edwin Chadwick [the title much abbreviated], together with *Strictures on the above Pamphlet*, by Thomas Nicholson, Contractor, 24pp., cr. 8vo, 1846: and a REPORT OF COMMONS SELECT COMMITTEE, entitled "Railway Labourers and Labourers of Public Works," 44p., and Thompson's advertisement, *describing and illustrating a model cottage to cost from £52 to £65*, 8vo, the three pamphlets, 10s

1846
A complete little history of this subject (see also *Handbook*, p. 7)

LOCAL TREATMENT OF RAILWAYS.

- 498 **Railway and LAND TAXATION**, showing the Origin, Progress, etc., of Poor and other Rates, and their injustice with reference to Railways, with a Digest, etc., 2s6d

1844
The author, struck with the oppressive nature of these rates, gave much research to the subject, so that he might present it free from all abstruseness.

PARSLOE, 1878.

- 499 **Parsloe, Jas.** OUR RAILWAYS, 294pp., cr. 8vo, *cl.*, 6s 1878
Management and operations, historical notes, history of great Companies, items on Fares, Rates, Reform, etc., a capital little work.

ROBERT STEPHENSON ON THE RAILWAY SYSTEM.

500 **Stephenson, Robert.** ADDRESS (on the Railway System) as President of the Civil Engineers, 34pp., 8vo, wrappers, 10s6d

January, 1856

Extent of Railways—Cost—Works—Working—Traffic—Wear and Tear—Fares—Post Office Legislation—Management—Telegraph—Accidents—General Results—Practical Application. ("The interests of the public and of the Companies are identical not antagonistic." p. 12.)

STRETTON, 1893.

501 **Stretton, C. E.** SAFE RAILWAY WORKING, numerous illustrations, 230pp., 4s6d (post free) 1893

History of Companies.

ACKWORTH, 1889.

502 **Ackworth, W. M.** THE RAILWAYS OF ENGLAND, illustrated, 427pp., 8vo, cloth, 12s6d 1889

A very interesting account of the present conducting and operation of English Railways, arranged under the headings of the leading Companies.

GREAT-EASTERN RAILWAY SYSTEM.

503 **Great-Eastern System.** Bill for Railways, from Norfolk Railway at Thorpe St. Andrew to North Walsham, and to Aylsham and Cromer, 22pp., 3s6d 1860

504 ——— (General Powers) Ramsay, Northern and Eastern, and Tending Hundred Bill, 6pp., folio, 1s6d 1870

505 ——— (Metropolitan Railways, etc.) Bill, 24pp., 2s6d 1870
Ground under Liverpool Street, Hackney Downs, Agreements with Metropolitan Company.

506 ——— Eastern Counties' TIME TABLE of 1845

GREAT-NORTHERN RAILWAY.

507 **Great-Northern System:** Hertford and Welwyn Junction Railway Act, 2s6d 1854

508 **Luton, DUNSTABLE, and WELWYN Junction Railway, ORIGINAL PROSPECTUS,** 4pp., folio, including map, 7s6d Circa. 1854

Hon. W. F. Cooper, Lord of the Admiralty; Inskip, Mayor of Hertford; Lucas, How, Jordan, Everett, Bolton, Terraby, Stormer, Tomson, Phillips, Swarder, Pledge, and Austee, all of Luton, Committee; J. C. Birkenshaw, Engineer. LUTON was at this time the largest English town without a railway.

GREAT-WESTERN RAILWAY.

509 **Great-Western Railway and Brentford Railway Act** for additional capital, June, 1857, 1s6d

510 ——— Amended Bill for leasing the Great-Western and Brentford Railway to the G.W.R., 21pp., folio, 2s6d 1859

511 ——— (West Midland Amalgamation) Act, 56pp., 5s 1863

511A BOURNE (J. C.) History and Description of the Great Western Railway, with numerous views executed in lithography, coloured section, geological map, etc., IN SPOT-LESS CONDITION (THE FINEST COPY I HAVE EVER SEEN), folio, hf cf, £3 3s 1846

Just as the "COLOURED VIEWS ON THE LIVERPOOL AND MANCHESTER RAILWAY" are the most beautiful of all the early railway publications, so may the work above be considered the most impressive of them.

The Great Western in its early days was almost awe inspiring in its magnificence; and everyone seemed to co-operate with the great BRUNEL to play upon the admiration of the marvellous. No cramped-up carriages: no cheeseparing in land or iron; no apprehension as to locomotive power. As far as this line stretched the traffic from the world's capital should be conveyed westward, not only with all the newly acquired speed, but with twice the luxury of room and ease that "Puffing Billies" had ever before permitted. No one then had dreamt of Yankee locos. dashing up a Lickey incline. Indeed, as the above work pointed out, four times the ordinary power was required to ascend an incline of 1 in 75, and whatever was the case on a high road, on a railway easy inclines were practically essential. So nothing worse than 1 in 660 was to trouble the engine at any point, and, in fact, where there was heavy traffic, only 1 in 1320 (or, four feet in the mile). Concede levels, and even NICHOLAS WOOD considered that, on a broad gauge, if men were only rash enough to put things to the stiffest test, the great race for speed could be won.

This magnificent volume of MR. J. C. BOURNE, after dealing with the great mechanical facts of the day, a history of the line, topography, geology, antiquities of the line-side, gives a full description of the plates, which, opening with a rather puzzling locomotive, shows us the fine Bristol Station Entrance Gateway, ponderous bridges, royal stations, and hotels, vast cuttings, the first monsters of speed in sleepy wayside stations and in their mechanical stables, rough-hewn tunnels, and many rural scenes of extreme beauty; together with glimpses of little details dear to the eye of the engineer, and the whole as they were five years after the opening of the line.

BOURNE'S HISTORY OF LOND. AND BIRM. RAILWAY.
(Now L. and N.W.R.)
(Handbook, p. 60)

PRESS OPINIONS.

"A more singular combination of the pictorial and the scientific . . . cannot be easily imagined . . . The representation of the line during progress will perpetuate some exceedingly picturesque and curious scenes."—*Gentleman's Magazine*, Oct., 1838

"The lithographs are of the highest engineering and picturesque interest, admirably executed, . . . Of the artistic spirit of the lithographs we cannot speak too highly."—*Architectural Magazine*.

"Drawings in the first style of lithographic art."—*Civil Engineer*.

"The swarms of excavators, with the contrivances for raising the loads, the materials, scaffoldings and tackle, form striking scenes of the mechanical-picturesque, pleasing to the eye, upon the same principle that shipping and craft are so attractive. . . . The effect of light down the shafts of the tunnels is capitally imitated by the tinted lithography."—*Spectator*, January 19th, 1839.

CANADA.

- 512 **Great-Western Railway of Canada**, Directors' Report, January, 1857, 42pp., with large folding map, 8vo, *wrappers*, 3s6d London, 1857

THE OLD STOCKTON AND DARLINGTON.

- 513 **Jeans, J. S.** JUBILEE-MEMORIAL of the RAILWAY SYSTEM, a History of the STOCKTON and DARLINGTON RAILWAY, a record of its results, 315pp., 8vo, *cloth*, SCARCE, 10s6d 1875

This book comprises the history of railways as far as it is connected with their birthplace. We read here of course the history of the pioneer railway, and of the PEASES, JOHN DIXON, HACKWORTH, and STEPHENSON himself, while the illustrations include the first locomotive, the first passenger railway coach, and portraits of BACKHOUSE (first railway banker), of PEASE, and of STEPHENSON.

LANCASHIRE AND YORKSHIRE RAILWAY.

Fine Old Views.

- 514 **Views on MANCHESTER and LEEDS RAILWAY**, *drawn on stone* by A. E. TAIT, with descriptive history by E. BUTTERWORTH (includes 19 plates, 19in. by 13in., *executed by Day and Haghe*), £3 3s (Bradshaw and Blacklock), 1845

This work is decidedly rare, and for many years no copy has been offered to me.

LEEDS.

- 515 **Leeds**.—Exact Copy of Plan of Leeds Central Station, 1847, 3s6d

NORTH-BRITISH RAILWAY.

- 516 **Copy of Address to Mr. HODGSON**, 7s6d

For five years before and five years after the days of Mr. Hodgson, the N.B.R. paid no dividend. He reigned from 1855 to 1867, rising to a 3½% dividend in 1861. Below is a testimonial address signed by eight directors and many others, acknowledging his wise rule, of date about 1865. By November, 1866, "a great battle raged in the North," and Mr. Hodgson was fighting—evenly matched—an Investigation Committee and his fellow directors.

[For ACCOUNT of the battle, see *Herapath's Journal*, 1866-67.]

- 517 **Ayton**.—Speech of Jas. Ayton (Advocate) on the Sunday Trains Question, Edinburgh and Glasgow Ry., 5th March, 1847, 8pp., 1s6d Glasgow, 1847

- 518 Sunday Railway Travelling.** The History and Nature of the Sabbath, as contained in Writings of Calvin, Luther, etc., by EDINENSIS, 16pp., roy. 8vo, 3s6d. Edinburgh, 1847
A protest against "a handful of unscrupulous Sectarians" attempting the entire closing of the EDINBURGH and GLASGOW Railway on Sundays.

NORTH-LONDON RAILWAY.

- 519 North-London Railway.** Additional Works at Poplar Bill, 11pp., 1s6d 1864

QUEBEC.

- 520 Quebec and Halifax Railway.** Final Report of the Officers employed on the Survey of the Line, with the subsequent Correspondence thereon, and on Public Works in Canada, 73pp., folio, Presn. to Parliament, 1849, 10s6d

REMINISCENCES OF THE EASTERN COUNTIES RY.

- 521 Reminiscences of Railway Making, Rhymes, etc.,** 123pp., cr 8vo, cloth, RARE, 7s6d 1845

Inspired by the White Elephant Railway (Eastern Counties, now part of Great Eastern). The poet its only friend. But may be even yet—

*" . . . shall ye, ye Eastern sons behold,
 " Your present labours turn'd to future gold."*

SPAIN.

- 522 Report of Rendel and Beardmore to Directors of ROYAL NORTH OF SPAIN RAILWAY,** together with the brief Report of GEORGE STEPHENSON, including his opinion on the best railway routes between Biscay and Madrid, 28pp., 8vo, sewn, 5s6d

London, 1845

LARDNER reported in 1850 that only one railway had then been constructed in Spain, viz., from Barcelona to Mataro (18 miles), but the above connects GEORGE STEPHENSON with SPAIN.

- 523 Report by Colonel YOLLAND to LORDS COMMITTEE of PR. COUNCIL FOR TRADE on the METROPOLITAN RAILWAY SCHEMES** proposed by Bills, Session 1864, 27pp., folio, 2s6d

REPORT (SELECT COMMITTEE) METROPOLITAN LINES.

- 524 Report of Commons Select Committee on Railway Schemes (Metropolitan),** with map shewing lines proposed, postponed, and allowed, 5pp., folio, 3s6d 29th February, 1864

SOUTH-EASTERN RAILWAY.

- 525 South-Eastern Railway Co., and the READING, GUILDFORD, and REIGATE Railway Co. Articles of Agreement,** 29pp., 8vo, original cloth, RARE, 7s6d 1847

The Romance of the Bradshaw Guides.

YEARs ago there was a claim made by one GADSBY, of Manchester, that he, and not BRADSHAW, was the originator of Railway Guides (*i.e.*, general Time Tables), and he claimed that he issued his first Guide in 1839. Mr. FITZGERALD, on p. 19 of the *Story of Bradshaw's Guide*, however, shows that Mr. GADSBY'S No. 1 was issued January, 1840, whereas Mr. BRADSHAW issued his first tiny book *Time Table* (subsequently called *The Railway Companion*) in October, 1839. It was no doubt a slip of memory, but the point lends an interest to the GADSBY Tables,

which are very rare.

At the time of the above claim, Mr. GADSBY said that BRADSHAW *did not publish except on a broad sheet*. Now as the "*Railway Companions*" were but neat little opuscles, with maps, they may have been small enough for him to have overlooked them. It is remarkable that there was some truth in the statement as to the broad sheet, and that Mr. FITZGERALD does not refer to the fact that when Mr. BRADSHAW'S Time Tables had assumed the page size which they now retain,

they were made up from a broad sheet *which had been issued for some months previously*.

Of these very rare broad sheets I have had the good fortune to rescue two. One was dated August, 1841, but the one just to hand is dated as early as April, 1841, and I consider it the earliest known ancestor of the line of BRADSHAW of the quarto shape.

If made up in book form it would occupy twenty-one pages, and includes the tables of thirty-seven railways. It was issued by Bradshaw and Blacklock, and (this copy at least) was published by TILT and BOGUE, of London. I value this famous historical sheet (April, 1841) at £3 3s. (No. 525A).

Space does not admit of entering with detail into the history of the little "*Companions*," but I may say that evidence now goes to show that no "*Companion*" or "*Time Table*" was issued prior to the 19th of OCTOBER, 1839, and I have never received one later than NOVEMBER, 1847. There is a NOVEMBER issue of 1839 almost unknown. Of the early issues of 1840 I have records marked as follows:—

THE BRADSHAWs OF 1840.

Title.	Date.	No.	Pub. at.
1. Time Table.—1st Mo., 1st, 1840		2	6d.
2. Companion.—1st Mo., 1st, 1840		3	1s.
3. Companion.—1st Mo., 25th, 1840		3	1s.
4. Time Tables.—2nd Mo., 22nd, 1840		2	6d.
5. Companion.—2nd Mo., 25th, 1840			1s.
6. Companion.—4th Mo., 1st, 1840			1s.
7. Companion.—7th Mo., 1st, 1840			1s.

The Bradshaws of 1840.—continued.

Besides which, I have recorded four issues having no mention of their month of issue, all being entitled "*Companions*."

No. 8,	in which the terminus of the G. W. R. is Steventon	
No. 9*	" " "	Farringdon Road
No. 10	" " "	FARRINGTON ROAD
No. 11	" " "	WOOTON BASSET

THE BRADSHAW'S OF 1841.

All "Companions."

No.	G. W. R. Terminus.	Further distinctions.
1.	WOOTON BASSET.—	Gloucester Ry., 4 trains. No Index.
2.	Do.	Do. 6 " No Index.
3.	Do.	Do. 6 " Index appears.
4.	BRISTOL.—	
5.	BRIDGWATER.—	Gloss, Map. No separate page for G. W. R. fares
6.	Do.	—Brighton table appears (not in Index)
7.	Do.	—Gloucestershire—Bromsgrove, next Birm'ham
8.	Do.	Do. Lifford
9.	Do.	—Croydon table p. 12, above South-Western
10.	Do.	—On p. 27 Notice for Newc. and Sund. trains
11.	Do.	—A blank space below Midland Counties table
12.	Do.	—All maps and plans at end

There are many differences in most issues, but the above points of difference admit of briefest description.

In 1842 and subsequently the "*Companions*" grow fewer, as the "*Guide*" was in active circulation, and I doubt whether there were ever twelve issues in any year afterwards. In a future issue I propose to detail all those recorded.

[In the meantime I warn bookbuyers and the trade against duplicates and incomplete copies, and that few of the "*Companions*" are easy to collate.]

The following BRADSHAW'S are now on sale :—

	1840	Steventon issue,	10s	
(526-531)	1841	Nos. 1, 2, 5, 6, 8, and 12 (as above)		5s each
(532-535)	1842	Four separate issues		7s6d "
(536-538)	1843	Three issues		8s "
(539-540)	1844	Two issues		9s "
(541)	1845	One issue		10s "

If asked what interest attaches to a Time Table, I say that every page is as it were a photograph of the early operations of the old British lines ; every page is pregnant with old railway history ; every page represents, too, the early results arising from the sinking of a million pounds of British capi-

tal, and the whole represents the best procurable evidence of what then constituted our PASSENGER RAILWAY SYSTEM.

They are but Time Tables, no doubt, but they are Time Tables as different to those of 1894 as a record of the days of the Norman Conquest is to the latest Court Circular.

* In No. 9 there are six notices below the Birmingham and Gloucester Table.

EARLY BRADSHAW RAILWAY GUIDE.

- 542 **Bradshaw's Monthly Railway and Steam Navigation Guide** for Great Britain, Ireland, and the Continent, 101pp., square yellow wrappers, May, 1847, 7s6d

This is numbered 166, but is really No. 67 or thereabouts, allowing for the curious number jump. The old "Companions" died this year, and a Continental Bradshaw was first published. There are "Answers to Correspondents," but no Index to Stations. There is no Cornish railway, no Caledonian, no Great Northern, and no line in Wales except Taff Vale. (These early copies are now almost unprocurable).

Steam Carriages.

- 543 **Minutes of Evidence** before SELECT COMMITTEE, with Proceedings. Ordered by Commons to be printed 25th July, 1859. 30pp, 5s6d

This is the Bill referred to by YOUNG in his STEAM ON COMMON ROADS (1860), p. 409. Mr. McAdam, in his evidence (p. 1) says, Up to the year 1857 he was perfectly convinced that locos. could never travel upon turnpike roads.

STEAM CARRIAGES versus LOCOMOTIVES.

- 544 **Gordon, Alex.** OBSERVATIONS ADDRESSED TO THOSE INTERESTED IN EITHER RAILWAYS OR TURNPIKE ROADS, shewing the comparative expedition, safety, convenience, and public and private economy of these two kinds of road for internal communication. 31pp., cr. 8vo., VERY RARE, 15s 1837

Shewing that even in 1837 eight years after the great contest Locomotive Railways were not absolutely safe against being superseded by Steam Carriages. HERAPATH held out for railways, but spoke of this as the best account of steam on common roads and admired the account of locomotive boilers. See HERAPATH'S MAG., vol. II. (1836) p. 276.

Locomotives and other Engines

"THE GREAT-WESTERN."

- 545 **Account of Experimental Trip** OF THE "GREAT WESTERN," NEW LOCOMOTIVE PASSENGER ENGINE, made on the 13th June, 1846. [Extracted from the *Morning Herald*, 15th June.] 16pp., sewn, 7s6d 1846.

SIR DANIEL GOOCH'S "Ultimatum of the Broad Gauge," 79 miles an hour (see *Stretton*, 79—80)

JOHN ERICSSON.

(Almost Winner of the Great Locomotive Contest ; Inventor of the Screw Propeller ; Builder of the Monitor.)

- 546 **Caloric Engine** [Description of] invented by J. Ericsson, 14pp. and frontispiece, dated London, 2nd December, 1833, VERY RARE, 10s6d

An attempt to supersede Steam.

See also *Mechanic's Magazine*, vol. XX (1834), for further description, by Ericsson, of this Engine ; and Church's *Life of E.* (Hbk. p. 111.)

AN INTERESTING NOTE BOOK.

- 547 **Engineers' MS. Note Book**, giving dimensions in great detail of eleven Locomotives on English and Continental Railways about the year 1843. 12mo, red calf, 5s

The name "JOHN B. PALMER, Newcastle-on-Tyne, 1842," written within.

FAREY ON THE STEAM ENGINE.

- 548 **Farey, John. TREATISE ON THE STEAM ENGINE**, historical, practical, and descriptive, 728pp., 25 plates, 4to., boards, 12s6d (pub. £5 5), 1827

"Mr. Farey's knowledge relating to patents was almost unrivalled for extent and accuracy. The above book was his principal work, and is regarded as of high authority, especially on historical points."—Imp. Dict. Biog.

BOILERS.

- 549 **Franklin Institute Report on the Strength of Materials for Steam Boilers**, 254pp., royal 8vo, 5s Philadelphia, 1837

DRAWINGS.

- 550 **Lithograph Drawings of (a) Curtis' Safety Railway Carriage**, 1840, 2/6.

- 551 ————— (b) **SHARP, ROBERT, Passenger Locomotive, "Atlas,"** 3s6d.

EARLY LOCOMOTIVES.

- 552 **Locomotives and LOCOMOTIVE BUILDING**, including the Origin and Growth of Rogers' Locomotive Works (1831 to 1876) with numerous photographic plates, wood-cuts of old locos., &c. 149pp., Imp. 8vo., cl., 10/- New York, 1876.

ROGERS' KETCHIM and GROSVENOR, made their first loco., Sandusky, in October, 1837. It and their later locos. are here described and illustrated as well as Murdock's model, the "Rocket," the "Stourbridge Lion," the "Best Friend," 1831 ; the "Tom Thumb," the "South Carolina," the "De Witt Clinton," 1831, and the bogie loco., "Essex," 1838.

STEPHENSON'S LOCO., 1838.

- 553 Marshall, W. P.—Description of the Patent Locomotive Steam Engine of Messrs. Stephenson & Co. [built for Cubitts, in 1836], with four plates and numerous woodcuts. Revised by ROBERT STEPHENSON, 67pp., 4to., cloth, VERY RARE, 25s 1838.

Probably the most important, longest, and most complete description of a locomotive ever written.

MILNE.

- 554 Milne John. PRACTICAL VIEW of the Steam Engine (written both in French and English), 175pp., 8vo., boards. 7s6d 1830
 555 Pambour, Chev. G. de. A NEW THEORY of the Steam Engine, 58pp., 8vo., wrappers, FIRST EDITION, 5s
 London, 1838

LOCOMOTIVES IN WAR.

- 556 Pittinger, Rev. Wm. CAPTURING a LOCOMOTIVE: a History of Secret Service in the late War. Illustrated. 354pp. er. 8vo, cloth, 10s Philadelphia, 1888

An extraordinary account of Locomotives and Railways in the great American Civil War.

ENGINES, ATMOS. RY., TELEG., SCREWS.

- 557 Portwine, Edward. THE STEAM ENGINE from earliest times. Atmospheric Railways, Telegraph, and Screw Propeller. Illustrated. 144pp., 18mo. cloth, 3s6d 1847
A neat interesting little book. It held Mr. PETER CLARKE, of the Brighton line up to execration for his wage reductions, &c.

ENGLAND'S CLAIM TO INVENTION OF STEAM ENGINE.

- 558 Partington, C. F. The CENTURY of INVENTIONS of the MARQUIS of WORCESTER, with historical and explanatory notes and a biographical memoir. 138pp. 12mo, boards, 5s6d
 Murray, 1825

A SCARCE WORK ON LOCOMOTIVES.

- 559 Students' Guide to the LOCOMOTIVE ENGINE: being a description of the different modes of constructing locomotives, details of the component parts, and the nature of their employment. Illustrated by 72 copper-plates. 142pp., 8vo, VERY RARE, 10s6d (Williams) London, 1849
Principally a translation from the French of Flachet and Petiet, includes illustrations of locos. by Bury, Taylor, Fenton, Murray, and Stephenson.

STEAM ENGINE.

- 560 Templeton, W. INCITEMENTS to STUDIES of Steam and the Steam Engine. 38pp., 18mo, limp cloth, RARE. 3s6d 1848

CURIOSITY.

- 561 Walmsley (Wood Engraver). Prospectus, with illustrations of the (so-called) first Locomotive and first Steamboat. 1s6d

Atmospheric Railways.

562 Kingsley, Lieut. Jefferies, INVENTION, WATER, INSTEAD of COAL, the IMPELLING POWER, the Steam Engine superseded. Applicable to Water Supply, Pumping, also for short Atmospheric Railways. *A very curious 8pp. pamphlet, closely printed.* 3s6d 1857

563 Samuda, J. de A. A TREATISE on the ADAPTATION of the ATMOSPHERIC PRESSURE to the PURPOSE of LOCOMOTION on Railways, with two plates. 50pp., 8vo, *sewn*, 10s6d 1841

The second report of the operations of CLEGG and SAMUDA'S system on "The Silent Railway."

Steam Navigation.

EARLY WAR STEAMERS (1837).

564 Burt, Capt. NARRATIVE of a LATE STEAM VOYAGE from ENGLAND to INDIA, via the Mediterranean, in 1837. A RARE and VALUABLE PAMPHLET, 125pp., 8vo., *calf*, 10s. 6d. Calcutta, 1840

On p. 23 compares H.M. steamers, "Tagus," "Volcano," and "Firefly," with those of the India Company. The author says these vessels mounted two guns, twelve pounders. The India Co.'s War Steamer, "Hugh Lindsey," had four guns.

JAMES WATT.

565 Cleland, James. HISTORICAL ACCOUNT of the STEAM ENGINE and its application in propelling vessels . . . (etc.) 70pp., 8vo, 10s6d 1825

Gives a list of all the steam engines of Glasgow and district with their owners, and of all the steamboats on the Clyde, account of the relations between Bell and Fulton, speeches of Lord Liverpool, Davy, Boulton, Huskisson, Peel, Wedgewood, and many others on the work of Watt.

SAMUEL HALL, OF BASFORD.

Mr. Geo. Robt. Stephenson, at the STEPHENSON CENTENARY, after referring to the early opposition and hardships encountered, said, that "whilst GEO. STEPHENSON'S mind and energies were devoted to the advancement of *Railway Engineering*, and the improvement of the locomotive . . . other great minds were at work in designing and improving

THE MARINE ENGINE,

And among the men who stand out most prominently in connection with this work he might mention the names of BELL and HALL. I never think of HALL'S name without sorrow. He was unable to cope with the opposition which was brought to bear against him. His engines were condemned, taken out of the ships, and cast aside as useless; and yet, the principle of HALL'S MARINE ENGINES, designed about forty-five years ago (it was in 1835) is at the present moment

THE ONLY KNOWN INVENTION

"that ENABLES STEAMSHIPS TO TRAVERSE OCEANS, and Oceans could not have been traversed without his principles being adopted. His invention enables us to distil salt water to serve our marine boilers, and he has saved this country millions of tons of coal, yet he was never rewarded or recognised." (From *Newcastle Weekly Chronicle*, June 11th, 1881.)

For a further mention of Hall (Samuel Hall, of Basford), see also the review of ALDERSON'S *Essay on Steam in Mechanics Magazine*, (1834), Vol. XXI., p. 222; Vol. XXVIII. (1838), etc.; LARDNER on *Steam Engine*, 5th Ed., 1835.

* * *

In the *Collection of Papers on Steamboats*, in Hand-book, p. 103, No. 341, there is (1) an illustrated description of HALL'S IMPROVEMENTS, with testimonials. (2) HALL'S *Address to the British Association*, complaining of Dr. LARDNER'S injustice. (3) HALL'S *Address to Chairman of Commons Select Committee on Steam Communication with India*.

[Hall was also the first to succeed in using raw coal in locos. (see COLBURN *Loco. Engineering*, p. 92.)]

566 Princip, G. A. An ACCOUNT of STEAM VESSELS, and of Proceedings connected with Steam Navigation in British India. 104pp., with plates, appendices, and a capital frontispiece etching showing "THE ENTERPRIZE" coming to moorings. 4to, boards, FINE COPY, 25s Calcutta, 1830

The first record of the First Seven Years of Steam Navigation in India.

VERY EARLY WORK ON STEAM ENGINE (1818).

- 566A **Dodd, Geo.** STEAM ENGINES AND STEAM PACKETS. [Historical Dissertation ; Reports and Evidence in full of the Commons Select Committee, together with reports on Safe and Unsafe Engines ; and particulars of the four boiler explosions, and a narrative of Weld's Voyage from Glasgow to Dublin and London (with two plates, and possibly two others missing)], 280pp., 8vo, boards, 2ls 1818

This work is the second earliest extensive account of steam vessels that I have yet met with. If its historical dissertation had been more extensive, it might have been reckoned as one of the earliest histories of the steam engine. It has 25pp. historical, 109pp. Report of Select Committee, 50pp. Observations on ditto, and 28pp. on the " Voyage " [as it is quaintly called].

Financial History.

- The Original Capital of the Stockton and Darlington Railway was £170,000.
The Capital of the North-Eastern Railway (grown out of the S. & D. was in 1881)*, £55,000,000.
The Capital of the London and North Western Railway (1895) is £100,000,000.
The Capital invested in the Railways of Great Britain is £1000,000,000.
The Total Capital of the United Kingdom is said to be £10,000,000,000.
The Stockton and Darlington Railway, in 1830, earned £413 in twelve months
The North Eastern Railway in 1881* earned £413 every 2½ hours.

BRAZIL.—THE FIRST RAILWAYS.

[The first Brailian line was opened 21st April, 1854.]

- 567 The ORIGINAL PROSPECTUS of RECIFE and SAO FRANCISCO PERNAMBUCO RAILWAY COMPANY. (Benson, chairman ; Borthwick, Engineer). A little damaged, 7s6d Circa. 1855
- 568 RAILWAY INTELLIGENCE, January 7th, 1859, with financial particulars announcing disagreement with the De Mornays, the first section was opened 9th February, 1858, etc, 5s.
- 569 **Hadfield's** ACCOUNT of BRAZIL, including an account of the above Railway, and a Map shewing its course ; also a mention of the De Mornays and Borthwick, the engineer. 384pp., 8vo., illustrated (including portrait of the Emperor, only lately dethroned), 10s. 1854
- 570 **Cheffin's** Map of English and Scotch Railways, 1847 Edition, 3s6d

On these maps there are numbers to all the high roads. These appear to be the distances between the villages given to keep up with the railway projective spirit of the times. Broad gauge railways in operation are distinguished from ordinary gauge.

* Sir J. L. Bell's estimate.

(The first Brazilian Line was opened 21st, April, 1854.)

“FACTS, FAILURES AND FRAUDS.”

- 571 Evans D. Morier. FACTS, FAILURES, and FRAUDS, cr. 8vo, 1859
5s.

Mr. Hudson (67 pp.); Great Northern Railway Redpath Frauds, 50pp.; Bullion Robbery on South Eastern Railway, 11pp.; etc., etc. Full of amazing information.

RAILWAY FINANCE, 1879-80.

- 572 Fleming, Wm. The INDEX to OUR RAILWAY SYSTEM, and our Leading Lines, an Analysis of Railway Property. 1879-80. A hand-book for Shareholders. 116pp., royal 8vo., 3s6d

SPECIMEN OF AN 1845 MANIA SHARE APPLICATION.

- 573 Form of Application for 200 Shares of £25 each, filled in by a Manchester Solicitor at the time the great mania of 1845 was at its height (29th August). 2s6d

GREAT-EASTERN RAILWAY SYSTEM.

(Colne Valley Line).

- 574 Colne Valley and HALSTEAD Railway Company's Reports. February and August, '61; August, '62; February, '63; August, '78; February and August, '68. The seven papers, 5s.

This little Company, incorporated in 1858, tried in 1861 to extend to Colchester and Cambridge and thus connect the ports of Colchester and Harwich with Birmingham and Liverpool, but in making the attempt got half swallowed up by renowned WHITE ELEPHANT.

[G.E.R.] THE OLD “EASTERN COUNTIES.”

- 575 Smith, Arthur. The EASTERN COUNTIES RAILWAY, viewed as an investment. 24pp., 10s6d 1847

A brief and lucid historical financial sketch, shewing from the official accounts from January, '45, to July, '47, £35,000,000 embarked, and dividends ought to average not 4 per cent., but $\frac{1}{2}$ per cent. The crash came next year.

[G.E.R.] EASTERN COUNTIES.

- 576 Eastern Counties Railway. REPORT of DIRECTORS to Twenty-sixth Half-Yearly Meeting. 31st August, 1849 (E.L. Betts, chairman). 5s.

Of great interest as the first Ordinary Report after the Hudson crisis. The Capital account was to be closed, and Directors had undertaken that (for the first time) the profits, assets, and liabilities should be clearly shown.

[G.E.R.] A QUARTER OF A MILLION A MILE FOR A ROPE RAILWAY.

577 London and Blackwall RAILWAY REPORTS, February, 1847; August, 1848; August, 1850. Three Reports. VERY RARE. 7s6d

The Blackwall Railway was first known as the Commercial. In the mania of 1836, it was going to destroy the London Docks and have the East India House for a Station. (See Francis, vol. I., 293. In 1847 it had cost £287,678 per mile to make; (even the Croydon had cost only £80,000, and the Birmingham £38,000), and had only returned $1\frac{1}{2}$ per cent. on outlay. The Report (February, 1847) was claimed as "The most satisfactory presented since the opening of the line." They needed £27,000 to pay a Five per cent. dividend, and had £9,638 to pay it with (and both ropes broken!) The L. and B. is now one of the legs of the Great White Elephant.

[G.E.R.] NORFOLK LINE.

578 Norfolk Railway and the "White Elephant" (Eastern Counties). Eighteen Reports, Notices, etc., of the Norfolk Railway, between 1845 and 1862. 10s

The NORFOLK, in 1848, was the 17th railway of the United Kingdom in size, and the present accounts show some of the curiosities in its finance. Its boldest Major once hinted at cooked accounts, but all seemed rosy till the Elephant got it by "A mongrel agreement." A half per cent. dividend followed, and by August, 1850, when they expected £118,496 from the White Elephant, the latter claimed £141,448 from them. Difference, £259,944!!

GREAT-WESTERN RAILWAY.—1848 to 1851.

579 Great Western RAILWAY REPORTS, 1848 to 1850, for the following Half-yearly Meetings:—27th, 28th, 29th, 30th, 31st, 32nd, 33rd, 34th, and a MS. Report, August, 1843; with Statement of Accounts, June and December, 1848; June and December, 1849; June and December, 1850; June and December, 1851. The 18 Papers, 15s

The G.W.R. paid, in 1848, £6 10s; in 1849 and 1850, £4; and in 1851, £4 10s

An Atmospheric Railway.

580 G.W.R., SOUTH DEVON RAILWAY; Seventh half-yearly Report, August, 1847; Ninth half-yearly Report, to June, 1848; Report, Tenth half-yearly Meeting; Capital and Revenue Accounts to Dec., 1848; Report and two editions of Accounts, to 30th June, 1849; Official Assignee's Statement (23pp.), Aug. 27th, 1849; Report for 1849; Proceedings, Tenth half-yearly Meeting, February, 1850; Directors Report to June, 1850, Requisition for Special Meeting, 28th, August, 1850; Proceedings, Special Meeting (Exeter) 12th Nov., 1850; Directors Report and Accounts to 30th June, 1863. THE THIRTEEN PAPERS, 20s

This was a line on which the Atmospheric System was tried, and £351,000 lost (Assignee's Report).

G.W.R. in 1848.

585 **Railways** as they really are; or, Facts for Serious Consideration of Railway Proprietors.

No. 5. The GREAT WESTERN RAILWAY and all BROAD GAUGE LINES. 83pp., 8vo., *sewn*, 21s. 1848

No less than TWENTY-FIVE Broad Gauge Companies dealt with. Gives the names of the Directors of G.W.R. and the amounts they signed for in the speculating years 1844-5 (RUSSELL, £155,000; SIMMONDS, £271,250; BARLOW, £620,786, etc.) Shows the Company, during 5½ years, had required £4,595,929 to gain £4,626,665! (and yet it was paying 8 per cent. dividend).

G.W.R., 1849.

581 **Report** of COMMITTEE of CONSULTATION September 20th, 1849. 20pp. 5s.

G.W.R., 1850.

582 **Great Western Railway.** Notice of Special Meeting, for 25th April, 1850, to raise further Capital and consider further questions arising from CONSULTATION COMMITTEE. 4pp. folio, closely printed. 7s6d 1850

Long and ruinous contests and a vital struggle for territory had demolished 8 per cent. or 6 per cent. dividends, and five years of 4 per cent. had arrived. The proposal here is to spend Three-and-a-half Millions for completing lines and reduce salaries to extent mentioned (with strong protests against the principle. (See Herapath's Journal and Railway Times.)

G.W.R., 1850-51.

583 ——— Notice for Special Meeting, 28th November, 1850 over Terms and Conditions of LEASE of SOUTH WALES COMPANY. Folio. 3s6d

584 ——— Notices for Special Meeting, 15th April, 1851. to RATIFY AGREEMENT of 29th March, with SOUTH WALES RAILWAY (an epitome of which agreement is appended). 4to. 3s6d

GREAT-WESTERN OF CANADA, 1856.

586 **Great Western Railway of Canada.** Directors' Report July, 1856. 56pp., 8vo, *sewn*, 1s6d London, 1856

587 ——— Proceedings at General Meeting, London, October, 1856. 11pp., 1s6d

EXTENT OF SCOTCH AND IRISH SYSTEMS, 1858.

588 "Illustrated Times" Map of Scotland and Ireland, 1858. 1s6d

LANCASHIRE AND YORKSHIRE RAILWAY.

- 589 Railways as they really are. No. 7. LANCASHIRE and YORKSHIRE RAILWAY. By Smith. Second Edition. 40pp., 10s6d 1847

Fourteen of the directors have been signing contracts for nearly Three Millions. The L. and Y. shares, which, at the market prices, September, 1841, were worth £5.290,672, are now (Sept., 1847) worth £1,687,790. Why so many shares, issued 1845-6, when so few calls on former shares; why poor railways bought at premiums or guaranteed.

LONDON AND BRIGHTON, 1847-9.

- 590 Statistics of Railways. By JOSEPH MILLER. No. 2. LONDON and CROYDON Revenue and Capital Accounts, from 1835 to its amalgamation with BRIGHTON line. 4to, wrapper, 1848; No. 3, London, Brighton, and South Coast (last leaf missing) 1849; also, an earlier edition for London and Brighton (title missing), 1847. 5s6d

LONDON AND BRIGHTON, 1890.

- 591 London, Brighton, and South Coast Report and Accounts, June, 1890. 1s

LONDON AND NORTH-WESTERN, 1848.

- 592 L. and N.W.R. Appendix to Second Edition of The Battle of the Age, by ARTHUR SMITH. Appendix, No. 1. THE LONDON and NORTH WESTERN RAILWAY. 13pp. and three folding tables. 5s 1848

Either it (the L. & N. W. R.) has required more money to be expended on it than it gains, or sums used for dividends have been credited to capital account.

DAILY RAILWAY PRICES, 1846-7.

- 593 London Stock Exchange. A collection of NINETY-FOUR DAILY RAILWAY SHARE LISTS, between November 27th, 1846, and November, 3rd, 1847. VERY RARE. 10s6d

Nov. 27th to Dec. 28th, 15; Jan. 6th to April 28th, 15; April 29th to August 23rd, 30; Aug. 24th to Nov., 1847, 34. TOTAL, 94.

RAILWAY FINANCE, 1837.

- 594 Mudge, R. M. Observations on Railways. 10s. 1837
This is the first work on Railway Finance. (See also Handbook)

FINANCE OF NORTHERN LINES, 1838.

- 595 Observations on PRINCIPAL RAILWAYS (chiefly North of England and Scotch Railways), with coloured Maps, 64pp. 8vo, cloth. 5s6d 1838

This work on the companies now forming the Midland, the North Eastern, L. & N. W., some Scotch lines, is the first history of the companies, and the first work on the Finance of individual companies. (See also Handbook.)

COMPANIES CAPITAL AND EXPENDITURE, 1869.

- 596 Returns. Board of Trade Returns, shewing Capital and Loans of each Railway Company, 31st December, 1869 ; also Traffic Returns, Working Expenditure, Rolling Stock, etc., for 1869. 94pp., folio, 3s6d 1870

COMPANY STOCK AND SHARES, 1849.

- 597 Scrivener, H. The Railways of the United Kingdom. (Hbk. p. 117). 8vo, cloth, 7s6d 1849

STOCKS AND SHARES, 1849-50.

- 598 Slaughter, M. (Secretary, Railways Department) RAILWAY INTELLIGENCE (published under author. of Stock Exchange), No. 2, 40pp., for half-year ending 30th March, 1850. (Hbk. p. 117.) 4to, original wrappers, 5s

MR. SMILES AS A FINANCIER.

- 599 Smiles, Samuel. (Biographer, then Secretary Leeds and Thirsk Railway). RAILWAY PROPERTY: its Condition and Prospects. 64pp., 7s6d 1849

- 600 ——— SECOND EDITION, with cuttings pasted on, and other economical Pamphlets, including MURDOCK on the *Game Laws* (1851) and MACGILL on *Rent No Robbery*, 1851. 15s

Mr. Smiles tried consolation at the dawn of the Hudson crisis. He did not believe in "broad-cloth third-class passengers, or long boiler engines."—HERAPATH considered few productions equal to it in value, and spoke of the numerous and important facts recorded. (Vide Herepath's Journal, 1849, p. 105).

DIVIDENDS OUT OF CAPITAL, 1848.

- 601 Smith, Arthur. THE BUBBLE OF THE AGE ; or, the Fallacies of Railway Investments. 63pp., 8vo, stwn, 6s 1848

The author had as bad an idea of railway directors as HERBERT SPENCER (see Railway Morals). He refers to the curious Hudson guarantees of 10 per cent. to discounted lines, paying dividends out of capital, tackles the L. & N.W.R. fully, and considers everything connected with the Lancashire and Yorkshire deplorable ; refers also to G.W.R., L. & S.W.R., Brighton, S.E.R., Eastern Counties, and Yorkshire Lines.

SOUTH-EASTERN RAILWAY, 1845-6.

- 602 South Eastern Railway. GENERAL STATEMENT of the POSITION and PROJECTS of the Company, 1845-6, 45pp., 4s

Contains a history of this line, and proposals for West End terminus ; branches from Deptford Creek to near Canterbury, also to Sheerness and Faversham Creek and to Maidstone, Ashford, and Tunbridge. Parliament and the public forced on the Company the course of their trunk line from which to make branches. Was it fair to allow a North Kent Line?

S.E.R., 1847.

- 603** **Railways as they are.** By Arthur Smith. No. 2. The DOVER or SOUTH-EASTERN RAILWAY, 44pp., 8vo, sewn, 10s6d 1847

Brings a very heavy charge against all Railway Directors, and as regards the S. E. R., says that their present capital of £7,875,000, represents but £2,768,464. It has depreciated £5,912,510 in two years (!) and they are positively seeking powers to raise another Five Millions!

A "MANIA" LINE.

- 604** **South Union and BIRMINGHAM JUNCTION Map** of proposed RAILWAY of Mania period, 1845. 1s6d]

TUCK'S RAILWAY SHAREHOLDERS MANUAL.

- 605** **Tuck's Manual**, 1845, First Ed. Abstracts of Acts, finance of each company, and prices, from 1839. Continental lines; PROJECTED RAILWAYS: supported by Board of Trade, with capital £10,240,000: to be postponed, £1,810,000: reported against, £47,800,000. 3s6d
- 606** ——— Third Edition, with projected Railways, supported £34,020,000 (capital); postponed, £1,810,000; reported against, £33,265,000. 2s6d
- 607** ——— Fourth Edition, 4s6d
- 608** ——— Fifth Edition, with costs of English railways, synopsis of American railways, particulars of English Railway Bills; the supported Railways, representing £37,836,000: the postponed, £3,720,000: and reported against, £34,505,000. 2s6d
- 609** ——— Sixth Edition, with 374 projected railways, numbered but not classified, their capital, £372,750,000; projected Foreign and Colonial railways added; all projected railways indexed; and a list of amalgamated railways added. 2s6d
- 610** ——— Seventh Edition, 1846, with Remonstrance against the thunder of "*The Times*" and "SPACKMAN'S Sin"; total capital of projected railways. £427,720,000,* and a list of railways having deposited plans. 3s6d
- 611** ——— Eight Edition, 1847 (book enlarged from 300pp. to 412pp.) The total Capital of projected companies discreetly omitted, list of railway subscription Contracts, traffic returns, carrying expenses, cost of loco. power, working expenses of six companies; Brunel's estimate of one mile of Railway; Article on the Electric Telegraph (with chart); Second Report of Select Committee, August, 1846, Act for Commissioners, and Abstract of Act for Dissolution of Companies, all added, together with a List of Contents. 4s6d

*Somewhat over this amount was actually invested in railways twenty years later.

WHARNCLIFFE MEETINGS—PROXIES.

612 Specimen of the OLD FORM of PROXY, as used by the NORFOLK RAILWAY COMPANY in 1856, with notice below that a 2s6d stamp must be affixed ; together with a GREAT WESTERN NOTICE of a WHARNCLIFFE MEETING, for consideration of twenty-four new projects, and an attached FORM of PROXY requiring only a Penny Receipt Stamp ; dated 10th May, 1873. The two Papers, 5s.

(For Herapath's opinion on PROXY VOTING, "*A system which enables the drones to overcome the bees, and places too great a power in the hands of the directors.*" "*A worse system for railways never invented.*"—See *Herapath's Journal*, 1850, p. 489).

WORCESTER AT THE MANIA PERIOD.

613 Worcester Herald. A copy, with Advertisements of the great Railway Mania period of 18452s6d
[See also under "Magazines."]

MR. CHAMBERLAIN'S REMEDY FOR BAD TRADE.

[MAKE MORE AFRICAN RAILWAYS.]

What roads were for ROME railways are for England. What is the use of our new colonies without satisfactory communication? I say "use British capital and British credit to create an instrument of trade [by making railways]."—(Speech at BIRMINGHAM, 30th March, 1895)

History of Railway Law.

LIABILITIES IN 1847 (Third Mania Period).

614 COX, E. W. (Barrister). RAILWAY LIABILITIES. Liabilities of Provisional Committees, with account of the famous action of *Reynell v. Lewis*, won by an Advertisement Agent against a Committeeman of the Central Kent Railway. 54pp., 8vo, sewn, 1847
5s6d

The author incidentally mentions (p. 49) that speculating attorneys upon the debt of a single committeeman for £30 or £40, often made a profit of £100 !

RAILWAY LAW (Time of Second Mania).

615 Wordsworth, C. F. F. LAW RELATING TO RAILWAY . . . and other Joint Stock Companies, cr. 8vo, 5s. 1837

Includes terms of the Bubble Act, prohibiting all Joint Stock Companies, the text of the French Law of Partnerships en commandité, forms of the two essential deeds:—The "Parliamentary contract," and the "Subscribers' Agreement," etc.

Parliamentary History,

ACTS (MIDLAND RAILWAY AND GENERAL).

- 1836 etc. 616 **Midland Counties Acts**, 1836; 1838; 1840. The Midland Railway Amalgamation Act, 1844; the Midland, Nottingham, and Lincoln Act, 1845. Also LORD SEYMOUR'S ACT (August, 1840); GLADSTONE'S FIRST ACT (1842) and the COMPANIES' CLAUSES AMALGAMATION ACT (May, 1845). In one volume, folio, 30s

GOVERNMENT CONTROL FIRST ADVISED.

- 617 **Report**. The first from Select Committee on Railways. 121pp., folio, RARE, 10s 1839
Includes examination of Messrs. Glyn, Creed, Moss, Lawrence, Sims, Saunders and Booth, on the Management, Bye-Laws, etc., of their Companies.
- 618 ——— **THE SECOND REPORT**. 542pp., with Maps and Indexes, folio, RARE, 30s August, 1839
For ten years there had been no official attempt at Government interference. But at last it grew obvious that the interests of the public and of railway companies were not identical. Officers of railways acknowledged it in the evidence above, while Mr. Rathbone even confessed that the MIDLAND COUNTIES RAILWAY Third Class Carriages were mere open boxes without seats, the "PASSENGERS ARE TAKEN AS THE PIGS ARE." No more impartial Committee ever sat, and it recommended a Board for Government Supervision. It went into the Companies' finance, their power, and their taxation, speed, fares, treatment of passengers, etc. Appendixes include Returns from all British and Foreign Railways
N.B.—The Reports include evidence in full and in them is often to be found the only now available information on many points.

ANGLO-SCOTCH AND ANGLO-IRISH.

[Commission of Engineers to report on Communication between England, Ireland, and Scotland.]

- 619 **First Report**—dealing with the IRISH ROUTES, 50pp, and three maps. **Second Report**—dealing with LANCASTER and CARLISLE connection, 33pp, nine Maps and Plans. **Third Report**—dealing with the Short Grayrig Junction line (made to run the route through Kendal. Six maps and plans. 10pp.—**First Report** on the East Coast Route, 68pp., with a capital map of England and Scotch Lowlands; together with APPENDIX, with various Engineers' Reports, including GEO. STEPHENSON on the Great North British (tables.

and numerous coloured Maps, Sections, Gradients, &c., of all Lines discussed). 210pp. 59 coloured maps and plans. Altogether, 5 vols., folio, £3 10s, 16th, April, 1840, to 15th March, 1841.

1840-41

In August, 1839, after the issue of the famous FIRST and SECOND REPORTS ON RAILWAYS had been issued, Mr. O'CONNELL and Mr. HODGSON HINDE got the House to appoint engineers to inquire into the best routes for connecting the English railway system with DUBLIN, GLASGOW, and EDINBURGH. Capitalists were now apparently absolutely terrified at the prospect of embarking in projects entailing Parliamentary costs without knowing the DATA for success. All the proposed trunk lines that survived the 1836-7 mania are here considered and mapped out; the routes to Wales, the London and York, and the south Scotland routes included, and the routes of the Clarence, Hartlepool, etc.

N.B.—The Reports include evidence in full.

RETURNS ON ACCIDENTS.

620 Returns on Accidents, Openings, Bye-Laws, and Traffic; with a SUPPLEMENTARY, 6pp. (a Letter from Chairman of Eastern Counties Railway). 184pp, folio, 21s. 8th March, 1841

The Return was to state Bye-Laws disallowed, aggregate Traffic, all ACCIDENTS causing injury, railways opened after inspection, and lines opened, although condemned by inspector. Bye-Laws imposing fines for loss of ticket were disapproved, so were single line railways, four-wheeled engines, and various sleepers, rails and chairs, as used by the Eastern Counties Railway.

CAPITAL AND LOANS, 1861-2.

621 Board of Trade Returns from each Railway Company, shewing Capital and Loans, Traffic Returns, Expenditure and Accidents, for 1861 and 1862. 210pp. The two Returns, 5s6d 1862-3

BOARD OF TRADE CONTROL FOR ACCIDENTS.

622 Report of Select Committee on Railways, with Evidence. 210pp., folio, 21s 18th June, 1841

Report and Evidence on the subject of Special Board of Trade Control towards the Prevention of Accidents. The Companies, including the Manchester and Liverpool, greatly opposed. It was followed by Mr. Gladstone's first Act (1842). Evidence includes that of Hy. Booth, Geo. Stephenson (on danger from speed, etc.), Samuel Laing, C. A. Saunders, Sir F. Smith (Inspector-General of Railways).

AMALGAMATION, 1846.

(End of the 10 per cent. period).

- 623 **Amalgamation.** First Report from the Select Committee on Railways and Canals Amalgamation. 7pp, folio (8th April, 1846) and the SECOND Report, with evidence. 116pp., folio. 22nd June, 1846. THE TWO REPORTS, £2 2s

The reasons may be read here, which, when the Companies had reached the greatest height of their prosperity, led them to seek that extensive amalgamation which was followed by an "internecine warfare, almost equal to the Wars of the Roses," and doomed for ever their biggest dividends.

- 1848 624 ——— **Returns**, showing the extent and particulars of the Amalgamation of all Companies on July, 1848, with a very fine large folding Map, showing by colours the extent of each line in Great Britain and Ireland. 35pp., folio, two maps, 21s 1848
- The Midland Line is here the largest Railway in the United Kingdom; the York and Newcastle comes fourth; the Great Northern sixth; the Caledonian was exactly twice as big as the North British.*

ROYAL COMMISSION, 1865-6.

- 625 **Royal Commission** on Railways, March 1865 to May, 1866; Minutes of Evidence. 889pp, folio, 30s 1867

8510 *Mr. Galt states people charged 2s7½d from Liverpool to Manchester, and cost of conveyance is but One Penny. 11620. Excursion Trains injurious. 11628. Excursion traffic not very profitable. 14428 Cost of a Passenger Train per train mile, 2s6d 15514. Lancashire and Yorkshire Goods trains in 1851 carried on average of 38 tons per Goods train; L. & N. W. R., 50 tons. 14629. Russian Railway Carriages. 1906 G. E. R. Shares at 60 per cent. discount. G. W. R. at 40 per cent. discount. 16412. Dividend-less Companies, bad accommodation.*

Railway Biography,

GEORGE STEPHENSON.

- 626 **Layson, J. F.,** GEORGE STEPHENSON: the Locomotive and Railway, with portrait. 128pp., 16mo, 3s6d 1881
- A biography, written as a "Centenary Memorial."*
- 627 **Macnay, Chas.** (Centenary celebration, June 9th, 1881). GEORGE STEPHENSON and the Progress of Railway Enterprise, illustrated. 32pp., 12mo, wrapper, 3s6d 1881

- 628 **Story about George Stephenson**, the great Railway Engineer. 64pp, 18mo, original wrappers, pub. by Richardson, of London, Dublin, and Derby. 5s Circa. 1849

It appears from p. 62, that it was when Sir Wm. Follett used Stephenson's own argument to overcome Dr. BUCKLAND, that George gave vent to his approbation of the "Gift of the Gab."

TELFORD.

- 629 **Smiles' Life of Telford**, post 8vo, cloth, 3s 1837

DAVID STEVENSON.

- 630 **Stevenson, David.** (The first Clerk to the first Manager of London and Birmingham (now L. & N. W.) Railway. FIFTY YEARS ON the LONDON and NORTH WESTERN RAILWAY and other Memoirs of Life of Stevenson, edited by LEOPOLD TURNER. 153pp, 8vo, 3s. 1891

The first 45pp. deal with railway matters only, and include a reference (p. 51) to the great ability of RICHARD MOON. The remaining pages throw an interesting light on the ways of the world as seen through the spectacles of a philosophic railway official.

TREVITHICK.

- 631 **Trevithick.** Memorial Edition of LIFE of TREVITHICK, well illustrated. 24pp, 8vo, wrappers, 4s 1883

Briefly illustrates the engines of the first man who ever ran a locomotive on rails.

VIGNOLES.

- 632 **Vignoles, O. G.** LIFE of C. B. VIGNOLES. A Reminiscence of early railway history. 407pp, 8vo, cloth. 1889

Engaged on Liverpool and Manchester, North Union, Dublin, Kingston, Midland Counties, Sheffield and Manchester, etc.

An Anglo-French Relic of 1836.

IN THE DAYS OF PAMBOUR.

- NAVIER'S Lines of Railways and Use of Locomotive Engines**, translated by John Macneill, C.E., 8vo, hf cf, 21s 1836

This work was published as early as Pambour in English, when engineers were still greatly puzzled over the power or powerlessness of locomotives on "slopes." It has references to Adamson, Tredgold, and Wood, but finds M. Navier had really opened the way to future enquirers. The translator thought that railways for passengers should be differently made to those for merchandise. He believed in the experiments of professors, and became one of them, as well as chief railway engineer of Ireland.

LANCASHIRE AND YORKSHIRE RAILWAY.

- 589 **Railways as they really are.** No. 7. LANCASHIRE and YORKSHIRE RAILWAY. By Smith. Second Edition. 40pp., 10s6d 1847

Fourteen of the directors have been signing contracts for nearly Three Millions. The L. and Y. shares, which, at the market prices, September, 1841, were worth £5,290,672, are now (Sept., 1847) worth £1,687,790. Why so many shares, issued 1845-6, when so few calls on former shares; why poor railways bough at premiums or guaranteed.

LONDON AND BRIGHTON, 1847-9.

- 590 **Statistics of Railways.** By JOSEPH MILLER. No. 2. LONDON and CROYDON Revenue and Capital Accounts, from 1835 to its amalgamation with BRIGHTON line. 4to, wrapper, 1848; No. 3, London, Brighton, and South Coast (last leaf missing) 1849; also, an earlier edition for London and Brighton (title missing), 1847. 5s6d

LONDON AND BRIGHTON, 1890.

- 591 **London, Brighton, and South Coast Report and Accounts,** June, 1890. 1s

LONDON AND NORTH-WESTERN, 1848.

- 592 **L. and N.W.R.** Appendix to Second Edition of *The Battle of the Age*, by ARTHUR SMITH. Appendix, No. 1. THE LONDON and NORTH WESTERN RAILWAY. 13pp. and three folding tables. 5s 1848

Either it (the L. & N. W. R.) has required more money to be expended on it than it gains, or sums used for dividends have been credited to capital account.

DAILY RAILWAY PRICES, 1846-7.

- 593 **London Stock Exchange.** A collection of NINETY-FOUR DAILY RAILWAY SHARE LISTS, between November 27th, 1846, and November, 3rd, 1847. VERY RARE. 10s6d

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RAILWAY FINANCE, 1837.

- 594 **Mudge, R. M.** *Observations on Railways.* 10s. 1837
This is the first work on Railway Finance. (See also Handbook)

FINANCE OF NORTHERN LINES, 1838.

- 595 **Observations on PRINCIPAL RAILWAYS** (chiefly North of England and Scotch Railways), *with coloured Maps*, 64pp. 8vo, cloth. 5s6d 1838

This work on the companies now forming the Midland, the North Eastern, L. & N. W., some Scotch lines, is the first history of the companies, and the first work on the Finance of individual companies. (See also Handbook.)

COMPANIES CAPITAL AND EXPENDITURE, 1869.

- 596 Returns. Board of Trade Returns, shewing Capital and Loans of each Railway Company, 31st December, 1869; also Traffic Returns, Working Expenditure, Rolling Stock, etc., for 1869. 94pp, folio, 3s6d 1870

COMPANY STOCK AND SHARES, 1849.

- 597 Scrivener, H. The Railways of the United Kingdom. (Hbk. p. 117). 8vo, cloth, 7s6d 1849

STOCKS AND SHARES, 1849-50.

- 598 Slaughter, M. (Secretary, Railways Department) RAILWAY INTELLIGENCE (published under author. of Stock Exchange), No. 2, 40pp., for half-year ending 30th March, 1850. (Hbk. p. 117.) 4to, original wrappers, 5s

MR. SMILES AS A FINANCIER.

- 599 Smiles, Samuel. (Biographer, then Secretary Leeds and Thirsk Railway). RAILWAY PROPERTY: its Condition and Prospects. 64pp., 7s6d 1849

- 600 ——— SECOND EDITION, with cuttings pasted on, and other economical Pamphlets, including MURDOCK on the *Game Laws* (1851) and MACGILL on *Rent No Robbery*, 1851. 15s

Mr. Smiles tried consolation at the dawn of the Hudson crisis. He did not believe in "broad-cloth third-class passengers, or long boiler engines."—HERAPATH considered few productions equal to it in value, and spoke of the numerous and important facts recorded. (Vide Herepath's Journal, 1849, p. 105).

DIVIDENDS OUT OF CAPITAL, 1848.

- 601 Smith, Arthur. THE BUBBLE OF THE AGE; or, the Fallacies of Railway Investments. 63pp., 8vo, stvn, 6s 1848

*The author had as bad an idea of railway directors as HERBERT SPENCER (see *Railway Morals*). He refers to the curious Hudson guarantees of 10 per cent. to discounted lines, paying dividends out of capital, tackles the L. & N. W.R. fully, and considers everything connected with the Lancashire and Yorkshire deplorable; refers also to G. W.R., L. & S. W.R., Brighton, S. E. R., Eastern Counties, and Yorkshire Lines.*

SOUTH-EASTERN RAILWAY, 1845-6.

- 602 South Eastern Railway. GENERAL STATEMENT of the POSITION and PROJECTS of the Company, 1845-6, 45pp., 4s

Contains a history of this line, and proposals for West End terminus; branches from Deptford Creek to near Canterbury, also to Sheerness and Faversham Creek and to Maidstone, Ashford, and Tunbridge. Parliament and the public forced on the Company the course of their trunk line from which to make branches. Was it fair to allow a North Kent Line?

S.E.R., 1847.

- 603 **Railways as they are.** By Arthur Smith. No. 2. The DOVER or SOUTH-EASTERN RAILWAY, 44pp., 8vo, sewn, 10s6d 1847

Brings a very heavy charge against all Railway Directors, and as regards the S. E. R., says that their present capital of £7,875,000, represents but £2,768,464. It has depreciated £5,912,510 in two years (!) and they are positively seeking powers to raise another Five Millions!

A "MANIA" LINE.

- 604 **South Union and BIRMINGHAM JUNCTION** Map of proposed RAILWAY of Mania period, 1845. 1s6d

TUCK'S RAILWAY SHAREHOLDERS MANUAL.

- 605 **Tuck's Manual**, 1845, First Ed. Abstracts of Acts, finance of each company, and prices, from 1839. Continental lines; PROJECTED RAILWAYS: supported by Board of Trade, with capital £10,240,000: to be postponed, £1,810,000: reported against, £47,800,000. 3s6d

- 606 ——— Third Edition, with projected Railways, supported £34,020,000 (capital); postponed, £1,810,000; reported against, £33,265,000. 2s6d

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- 610 ——— Seventh Edition, 1846, with Remonstrance against the thunder of "*The Times*" and "SPACKMAN'S Sin"; total capital of projected railways. £427,720,000,* and a list of railways having deposited plans. 3s6d

- 611 ——— Eighth Edition, 1847 (book enlarged from 300pp. to 412pp.) The total Capital of projected companies discreetly omitted, list of railway subscription Contracts, traffic returns, carrying expenses, cost of loco. power, working expenses of six companies; Brunel's estimate of one mile of Railway; Article on the Electric Telegraph (with chart); Second Report of Select Committee, August, 1846, Act for Commissioners, and Abstract of Act for Dissolution of Companies, all added, together with a List of Contents. 4s6d

*Somewhat over this amount was actually invested in railways twenty years later.

WHARNCLIFFE MEETINGS—PROXIES.

612 Specimen of the OLD FORM of PROXY, as used by the NORFOLK RAILWAY COMPANY in 1856, with notice below that a 2s6d stamp must be affixed ; together with a GREAT WESTERN NOTICE of a WHARNCLIFFE MEETING, for consideration of twenty-four new projects, and an attached FORM of PROXY requiring only a Penny Receipt Stamp ; dated 10th May, 1873. The two Papers, 5s.

(For Herapath's opinion on PROXY VOTING, "*A system which enables the drones to overcome the bees, and places too great a power in the hands of the directors.*" "*A worse system for railways never invented.*"—See Herapath's Journal, 1850, p. 489).

WORCESTER AT THE MANIA PERIOD.

613 Worcester Herald. A copy, with Advertisements of the great Railway Mania period of 18452s6d
[See also under "Magazines."]

MR. CHAMBERLAIN'S REMEDY FOR BAD TRADE.

[MAKE MORE AFRICAN RAILWAYS.]

What roads were for ROME railways are for England. What is the use of our new colonies without satisfactory communication? I say "use British capital and British credit to create an instrument of trade [by making railways]."—(Speech at BIRMINGHAM, 30th March, 1895)

History of Railway Law.

LIABILITIES IN 1847 (Third Mania Period).

614 Cox, E. W. (Barrister). RAILWAY LIABILITIES. Liabilities of Provisional Committees, with account of the famous action of Reynell v. Lewis, won by an Advertisement Agent against a Committeeman of the Central Kent Railway. 54pp., 8vo, seven, 5s6d 1847

The author incidentally mentions (p. 49) that speculating attorneys upon the debt of a single committeeman for £30 or £40, often made a profit of £100 !

RAILWAY LAW (Time of Second Mania).

615 Wordsworth, C. F. F. LAW RELATING TO RAILWAY . . . and other Joint Stock Companies, cr. 8vo, 5s. 1837

Includes terms of the Bubble Act, prohibiting all Joint Stock Companies, the text of the French Law of Partnerships en commandité, forms of the two essential deeds:—The "Parliamentary contract," and the "Subscribers' Agreement," etc.

Parliamentary History,

ACTS (MIDLAND RAILWAY AND GENERAL).

- 1836 etc. 616 **Midland Counties Acts, 1836; 1838; 1840.** The Midland Railway Amalgamation Act, 1844; the Midland, Nottingham, and Lincoln Act, 1845.
Also LORD SEYMOUR'S ACT (August, 1840); GLADSTONE'S FIRST ACT (1842) and the COMPANIES' CLAUSES AMALGAMATION ACT (May, 1845). In one volume, folio, 30s

GOVERNMENT CONTROL FIRST ADVISED.

- 617 **Report.** The first from Select Committee on Railways. 121pp., folio, RARE, 10s 1839

Includes examination of Messrs. Glyn, Creed, Moss, Lawrence, Sims, Saunders and Booth, on the Management, Bye-Laws, etc., of their Companies.

- 618 ——— **THE SECOND REPORT.** 542pp., with Maps and Indexes, folio, RARE, 30s August, 1839

For ten years there had been no official attempt at Government interference. But at last it grew obvious that the interests of the public and of railway companies were not identical. Officers of railways acknowledged it in the evidence above, while Mr. Rathbone even confessed that the MIDLAND COUNTIES RAILWAY Third Class Carriages were mere open boxes without seats, the "PASSENGERS ARE TAKEN AS THE PIGS ARE." No more impartial Committee ever sat, and it recommended a Board for Government Supervision. It went into the Companies' finance, their power, and their taxation, speed, fares, treatment of passengers, etc. Appendixes include Returns from all British and Foreign Railways

N.B.—The Reports include evidence in full and in them is often to be found the only now available information on many points.

ANGLO-SCOTCH AND ANGLO-IRISH.

[Commission of Engineers to report on Communication between England, Ireland, and Scotland.]

- 619 **First Report**—dealing with the IRISH ROUTES, 50pp, and three maps. **Second Report**—dealing with LANCASTER and CARLISLE connection, 33pp, nine Maps and Plans. **Third Report**—dealing with the Short Grayrig Junction line (made to run the route through Kendal. Six maps and plans. 10pp.—**First Report** on the East Coast Route, 68pp., with a capital map of England and Scotch Lowlands; together with APPENDIX, with various Engineers' Reports, including GEO. STEPHENSON on the Great North British (tables.

and numerous coloured Maps, Sections, Gradients, &c., of all Lines discussed). 210pp. 59 coloured maps and plans. Altogether, 5 vols., folio, £3 10s, 16th, April, 1840, to 15th March, 1841.

1840-41

In August, 1839, after the issue of the famous FIRST and SECOND REPORTS on RAILWAYS had been issued, Mr. O'CONNELL and Mr. HODGSON HINDE got the House to appoint engineers to inquire into the best routes for connecting the English railway system with DUBLIN, GLASGOW, and EDINBURGH. Capitalists were now apparently absolutely terrified at the prospect of embarking in projects entailing Parliamentary costs without knowing the DATA for success. All the proposed trunk lines that survived the 1836-7 mania are here considered and mapped out; the routes to Wales, the London and York, and the south Scotland routes included, and the routes of the Clarence, Hartlepool, etc.

N.B.—The Reports include evidence in full.

RETURNS ON ACCIDENTS.

620 Returns on **Accidents**, Openings, Bye-Laws, and Traffic; with a SUPPLEMENTARY, 6pp. (a Letter from Chairman of Eastern Counties Railway). 184pp, folio, 21s. 8th March, 1841

The Return was to state Bye-Laws disallowed, aggregate Traffic, all ACCIDENTS causing injury, railways opened after inspection, and lines opened, although condemned by inspector. Bye-Laws imposing fines for loss of ticket were disapproved, so were single line railways, four-wheeled engines, and various sleepers, rails and chairs, as used by the Eastern Counties Railway.

CAPITAL AND LOANS, 1861-2.

621 Board of Trade Returns from each Railway Company, shewing Capital and Loans, Traffic Returns, Expenditure and Accidents, for 1861 and 1862. 210pp. The two Returns, 5s6d 1862-3

BOARD OF TRADE CONTROL FOR ACCIDENTS.

622 Report of Select Committee on Railways, with Evidence. 210pp., folio, 21s 18th June, 1841

Report and Evidence on the subject of Special Board of Trade Control towards the Prevention of Accidents. The Companies, including the Manchester and Liverpool, greatly opposed. It was followed by Mr. Gladstone's first Act (1842). Evidence includes that of Hy. Booth, Geo. Stephenson (on danger from speed, etc.), Samuel Laing, C. A. Saunders, Sir F. Smith (Inspector-General of Railways).

AMALGAMATION, 1846.

(End of the 10 per cent. period).

- 623 **Amalgamation.** First Report from the Select Committee on Railways and Canals Amalgamation. 7pp, folio (8th April, 1846) and the SECOND Report, with evidence. 116pp., folio. 22nd June, 1846. THE TWO REPORTS, £2 2s

The reasons may be read here, which, when the Companies had reached the greatest height of their prosperity, led them to seek that extensive amalgamation which was followed by an "internecine warfare, almost equal to the Wars of the Roses," and doomed for ever their biggest dividends.

- 1848 624 ——— **Returns**, showing the extent and particulars of the Amalgamation of all Companies on July, 1848, with a very fine large folding Map, showing by colours the extent of each line in Great Britain and Ireland. 35pp., folio, two maps, 21s 1848

The Midland Line is here the largest Railway in the United Kingdom; the York and Newcastle comes fourth; the Great Northern sixth; the Caledonian was exactly twice as big as the North British.

ROYAL COMMISSION, 1865-6.

- 1867 625 **Royal Commission** on Railways, March 1865 to May, 1866; Minutes of Evidence. 889pp, folio, 30s 1867

8510 *Mr. Galt states people charged 2s7½d from Liverpool to Manchester, and cost of conveyance is but One Penny. 11620. Excursion Trains injurious. 11628. Excursion traffic not very profitable. 14428 Cost of a Passenger Train per train mile, 2s6d 15514. Lancashire and Yorkshire Goods trains in 1851 carried on average of 38 tons per Goods train; L. & N. W. R., 50 tons. 14629 Russian Railway Carriages. 1906 G. E. R. Shares at 60 per cent. discount. G. W. R. at 40 per cent. discount. 16412. Dividend-less Companies, bad accommodation.*

Railway Biography,

GEORGE STEPHENSON.

- 626 **Layson, J. F., GEORGE STEPHENSON:** the Locomotive and Railway, with portrait. 128pp., 16mo, 3s6d 1881
A biography, written as a "Centenary Memorial."
- 627 **Maenay, Chas.** (Centenary celebration, June 9th, 1881). GEORGE STEPHENSON and the Progress of Railway Enterprise, illustrated. 32pp., 12mo, wrapper, 3s6d 1881

- 628 **Story about George Stephenson**, the great Railway Engineer. 64pp, 18mo, original wrappers, pub. by Richardson, of London, Dublin, and Derby. 5s Circa. 1849

It appears from p. 62, that it was when Sir Wm. Follett used Stephenson's own argument to overcome Dr. BUCKLAND, that George gave vent to his approbation of the "Gift of the Gab."

TELFORD.

- 629 **Smiles' Life of Telford**, post 8vo, cloth, 3s 1837

DAVID STEVENSON.

- 630 **Stevenson, David**. (The first Clerk to the first Manager of London and Birmingham (now L. & N. W.) Railway. FIFTY YEARS ON the LONDON and NORTH WESTERN RAILWAY and other Memoirs of Life of Stevenson, edited by LEOPOLD TURNER. 153pp, 8vo, 3s. 1891

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Books Wanted.

Stretton's History of Leic. and
Swannington Railway
Hughes' Construction of the
Modern Locomotive
Edwards' Modern American
Locos.
Francis' History of Railways

The Two Jameses and the Two
Stephensons

Windsor, A. W. Some Statistics
of our English Express
Trains (Luff), 1888, 8vo,
pp. 23

The Engineer article on the
Jubilee of Express Trains

Barry and Bramwell Railways
and Locomotives

ROBERT STUART.

Stuart on the Steam Engine.—The real name of the author was Robert Meikleham or **MICKLEHAM**, and I regret to have to record that he died in a workhouse.

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